U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: November 07, 2001

TO: Margaret Chong, OSC
USEPA Region II

FROM: Smita Sumbaly
RST Data Review Team

SUBJECT: QA/QC Compliance Review Summary

As requested quality control and performance measures for the data packages noted have been examined and compared to EPA standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness	Blanks
Spectra Matching Quality	DFTPP and BFB Tuning
Surrogate Spikes	Chromatography
Matrix Spikes/Duplicates	Holding Times
Calibration	Compound ID (HSL, TIC)

Any statistical measures used to support the following conclusions are attached so that the review may be reviewed by others.

Summary of Results

	I Total Metals	II RCRA Parameters	III TPH	IV FULL TCL
Acceptable as Submitted	____	____	X	____
Acceptable with Comments	X	X	____	X
Unacceptable, Action Pending	____	____	____	____
Unacceptable	____	____	____	____

Data Reviewed by: Smita Sumbaly Date: 11/07/01

Approved By: Jennifer Sey Date: 11/15/01

Area Code/Phone No.: (732) 225-6116

213579

NARRATIVE

CASE No. 2057

SITE NAME: **Veteran's Park Site**

South Plainfield, Middlesex County, New Jersey.

Laboratory Name: Chemtech Consulting Group, 282 Sheffield Street, Mountainside, New Jersey.

INTRODUCTION:

The laboratory's portion of this Case consisted of 06 waste soil samples collected on August 16, 2001.

The laboratory reported No problem(s) with the receipt of these samples.

The laboratory reported matrix problems with the analyses of TAL metals, RCRA, Total Petroleum Hydrocarbons(TPH) and Full TCL (Volatile/BNA/Pesticide/PCBs) - Organic/Inorganic parameters.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

Appropriate Form I's and Chain of Custody have been copied from the original data package and appended to the data assessment narrative for reference.

I. Volatile (VOAs)

Y Holding Time	NA MS/MSD
Y GC/MS Tuning	Y Compound ID (HSL, TIC)
Y Calibration, Initial	Y Spectra Quality
Y Calibration, Continuing	Y Standards
Y Blank	Y Chromatography
NA Surrogate Recovery	Y Data Completeness
Y Laboratory Control Sample	

Comments:

1. Refer to Data Assessment Narrative.

II. Base Neutral/Acids (BNAs)

Y Holding Time	Y MS/MSD
Y GC/MS Tuning	Y Compound ID (HSL, TIC)
Y Calibration, Initial	Y Spectra Quality
Y Calibration, Continuing	Y Standards
Y Blank	Y Chromatography
Y Surrogate Recovery	Y Data Completeness

Comments:

1. Refer to Data Assessment Narrative.

III. Pesticides/PCBs/Herbicides

Y Holding Times	Y Calibration Linearity
Y Instrument Performance	Y Blank
Y Surrogate Recovery	Y Retention Time Window
Y MS/MSD	Y Analytical Sequence
Y Compound ID (HSL,TIC)	Y RT Check for TCX and DCB
Y Chromatography	

Comments:

1. Refer to Data Assessment Narrative.

IV. Inorganic:

Y Data Summary/Tabulated Results
Y Initial and Continuing Calibration
Y Blanks
Y ICP Interference Check
Y Spike Sample Recovery
Y Duplicates
Y Detection Limits
NA Standard Addition Results
Y ICP Serial Dilutions
Y Holding Times
Y ICP Interelement Correction Factors
Y ICP Linear Ranges
Y Chain of Custody
Y Raw Data
Y Quantitation, Conversions, Dilutions, etc.

Comments:

1. Refer to Data Assessment Narrative.

REGION II START DATA ASSESSMENT REPORT

RFP Project #: 2057 **SDG #:** N5598

LAB: Chemtech Consulting Group **LAB Code:** CHEMED

SITE: Veteran's Park Site **Analysis:** TCL (VOA, BNA, PEST/PCBs) -Organic Parameters

Contractor: RST **Reviewer:** Smita Sumbaly **Matrix:** **Water:** NA **Soil:** 06

CERCLIS ID #:

The current Functional Guidelines for evaluating organic data have been applied.

All data are valid and acceptable except those analytes which have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detects), "R" (unusable), or "JN" (presumptive evidence for the presence of the material at an estimated value). All action is detailed on the attached sheets.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Analytical data qualified as "JN" or "R" may not be used to demonstrate compliance with Toxicity Characteristic or Land Ban Regulations.

Reviewer's Signature: Smita Sumbaly **Date:** 11/07/2001

Verified By: _____ **Date:** __/__/2001

On August 16, 2001, USEPA Region II RST - personnel collected six (06) soil samples for Target Compound List (TCL) organic analyses from the Veteran's Park Site, South Plainfield, Middlesex County, New Jersey. Within twenty-four hours of collection, samples were hand-delivered to Chemtech Consulting Group (CHEMED), 282 Sheffield Street, Mountainside, New Jersey. The laboratory verified that samples were received intact and properly custody sealed (sample cooler temperature recorded at 4.0°C).

Target Compound List (TCL) organic analyses were performed following the SW 846 Method No. 8260 for Volatile, Method No. 8270 for Semi Volatile, Method No. 8081 for Pesticide & Method No.8082 for PCBs.

Client identification (ID) and laboratory ID numbers:

Client ID No.	Laboratory ID No.	Matrix	Analysis
VP1	N5598-01	Soil	Full TCL
VP2	N5598-02	Soil	Full TCL
VP3	N5598-03	Soil	Full TCL
VP4	N5598-04	Soil	Full TCL
VP5	N5598-05	Soil	Full TCL
VP6 [1]	N5598-06	Soil	Full TCL

[1] Soil sample **VP6** is a field duplicate sample of sample **VP5**.

The results presented in the data package are acceptable with the exception noted in the following data assessment narrative.

A.2.2 Data Assessment (continued):

1. HOLDING TIMES:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following analytes in the samples shown were qualified because of holding time:

TCL- VOA, BNA, Pest/PCBs

VOA - The following data were qualified as estimated "J" or rejected "R" due to exceeding holding time criteria:

Sample ID	Matrix	Preservation	Date COllected	VTSR at Lab	Date Analyzed	Qualifier	# Compounds

Data met QC criteria

Note: If properly preserved, aqueous samples maintained at 4°C must be analyzed within fourteen (14) days of collection. If unpreserved, aqueous samples must be analyzed within seven (7) days for aromatic hydrocarbons. Soil/Solid samples must be analyzed within ten (10) days of collection.

BNA - The following data were qualified as estimated "J" or rejected "R" due to exceeding holding time criteria:

Sample ID	Matrix	Date Sampled	Date Extracted	VTSR at Lab	Date Analyzed	Qualifier	# Compounds

Data met QC criteria

Pest/PCBs/Herbicides - The following data were qualified as estimated "J" or rejected "R" due to exceeding holding time criteria:

Sample ID	Matrix	Date Sampled	Date Extracted	VTSR at Lab	Date Analyzed	Qualifier	#Compounds

Data met QC criteria

Note: Continuous extraction of water and Soil/Sediment/Solid samples must be started within seven (7) days of the date of collection. Extracts must be analyzed within forty (40) days of extraction.

A.2.2 Data Assessment (continued):

2. BLANK CONTAMINATION:

Quality Assurance (QA) blanks [i.e., method, trip, field or rinse blanks] are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the samples shown were qualified with "U" for these reasons:

A) Method Blank Contamination

TCL- Data

VOA - The following compounds were qualified as non-detected "U" in the associated samples due to method blank contamination:

Compound	Associated Samples
Acetone	VP3RE, VP6, VP5, VP4, VP2 & VP3

VOA - The following TICs were rejected "R" in the indicated samples due to detection in the associated method blank:

TIC	Associated Method Blank	Associated Samples
Data met QC criteria		

BNA - The following compounds were qualified as non-detected "U" in the associated samples due to method blank contamination:

Compound	Associated Samples
Data met QC criteria	

BNA - The following TICs were rejected "R" in the indicated samples due to detection in the associated method blank:

TIC	Associated Method Blank	Associated Samples
Data met QC criteria		

Pest/PCBs/Herbicide - The following compounds were qualified as non-detected "U" in the associated samples due to method blank/TCLP blank contamination:

Compound	Associated Samples
Data met QC criteria	

A.2.2 Data Assessment (continued):

B) Field or Rinse Blank Contamination ("water blanks" or "distilled water blanks" are validated like any other sample)

VOA/BNA/Pest/PCBs - The following compounds were qualified as non-detected "U" in the associated samples due to rinse blank contamination:

Compound	Associated Samples
Not applicable	

C) Trip Blank Contamination

VOA - The following compounds were qualified as non-detected "U" in the associated samples due to trip blank contamination:

Compound	Associated Samples
Not applicable	

VOA - All TICs qualified by the laboratory with a "B" (indicative of method blank contamination) or an "A" (indicative of a common adol laboratory contaminant) or suspected artifact of common laboratory contaminants were rejected "R".

Fraction	TIC	Samples
VOA	Column Bleed	VP1 & VP5

Data met QC criteria

Note: TIC compounds associated with a "best match" spectra and CAS number were qualified as presumptive evidence of a compound at an estimated value "JN" by the data reviewer. TICs not associated with a CAS number were qualified as estimated "J" by the data reviewer in the sample data.

VOA - The following TIC contaminants were rejected "R" in the indicated samples because these compounds are target TCL compounds also present in the associated volatile or semi-volatile fraction analyses:

Fraction	TIC	Samples
VOA	Phenol	VP1 & VP5

A.2.2 Data Assessment (continued):

3. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is bromofluorobenzene (BFB) and for semi-volatiles is decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error or missing, all associated data will be classified as unusable "R". The following samples shown were qualified with "R" because of tuning:

TCL DATA

VOA/BNA: Data met QC criteria.

4. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

A) Response Factor:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the VOA/BNA Target Compound List (TCL) must be ≥ 0.05 in both the initial and continuing calibrations. A value ≤ 0.05 indicates a serious detection and quantitation problem (poor sensitivity). If the mean RRF of the initial calibration or the continuing calibration has a response factor <0.05 for any analyte, those analytes detected in environmental samples will be qualified as estimated "J". All non-detects for those compounds will be rejected "R". The following analytes in the samples shown were qualified because of response factor:

Initial Calibration

VOA - The following compounds were either qualified as estimated "J" (positive values only) or rejected "R" (non-detected "U" values only) in the associated samples because the Initial Calibration Mean RRF value is < 0.05:

Fraction	Compound	Qualifier	Associated Sample(s)

Data met QC criteria.

A.2.2 Data Assessment (continued):

BNA - The following compounds were either qualified as estimated "J" (positive values only) or rejected "R" (non-detected "U" values only) in the associated samples because the Initial Calibration Mean RRF value is < 0.05:

Compound	Qualifier	Associated Sample(s)

Data met QC criteria.

Continuing Calibration

VOA/BNA - The following compounds were either qualified as estimated "J" (positive values only) or rejected "R" (non-detected "U" values only) in the associated samples because the Continuing Calibration RRF_{50} is < 0.05:

Fraction	Compound	Qualifier	Associated Sample(s)

Data met QC criteria.

B) PERCENT RELATIVE STANDARD DEVIATION (%RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these QC limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J"; and non-detects are flagged "UJ". If %RSD and/or %D grossly exceed QC criteria, non-detect data may be qualified "R".
For the PESTICIDE/PCB fraction, if %RSD exceeds 20% for all analytes except for the 2 surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the samples shown were qualified for %RSD and %D:

Initial Calibration

VOA - Positive values of the following compounds were qualified as estimated "J" in the associated samples because the Initial Calibration %RSD is between 30-90% when the mean RRF is > 0.05:

Compound	Associated Sample(s)
Bromomethane	VP1, VP2, VP3, VP3RE, VP4, VP5 & VP6
Chloroethane	VP1, VP2, VP3, VP3RE, VP4, VP5 & VP6
Acetone	VP1, VP2, VP3, VP3RE, VP4, VP5 & VP6
Methylene Chloride	VP1, VP2, VP3, VP3RE, VP4, VP5 & VP6

A.2.2 Data Assessment (continued):

BNA - Positive values of the following compounds were qualified as estimated "J" in the associated samples because the Initial Calibration %RSD is between 30-90% when the mean RRF is > 0.05:

Compound	Associated Sample(s)
2,4-Dinitrophenol	VP1[1], VP2[1], VP3[1], VP4[1], VP5[1] & VP6[1]
4,6-Dinitro-2-methylphenol	VP1[1], VP2[1], VP3[1], VP4[1], VP5[1] & VP6[1]

[1] Both the compounds will rejected later due to continuing calibration criteria, therefore not qualified as estimated "J" in the above associated samples.

Note: According to the SOW, 2,4-Dinitrophenol, 2,4,5-Trichlorophenol, 2-Nitroaniline, 3-Nitroaniline, 4-Nitroaniline, 4-Nitrophenol, 4,6-Dinitro-2-Methylphenol, and Pentachlorophenol only require a four-point initial calibration at 50, 80, 120, and 160 total nanograms because detection at < 50 nanograms per injection is difficult. Due to professional judgement, no action was taken with associated non-detected "U" sample data or positive results determined near the low end of the Initial Calibration curve sequence.

Pest/PCBs/Herbicides - The following compounds were qualified as estimated "J" or rejected "R" in the associated samples because the linearity criteria or the percent relative standard deviation (%RSD) of the Initial Calibration is > 20% for either one or both GC columns:

Compound	Percent Recovery	QC limits	Qualifier	Associated Sample(s)

Data met QC criteria.

Continuing Calibration

TCL VOA - The following compounds were qualified as estimated "J" because the Continuing Calibration %D is between 25-90% when the RRF_{50} is > 0.05:

Compound	Associated Sample(s)
Methylene Chloride	VP3RE[1], VP4[1], VP5[1] & VP6[1]
Chloroethane	VP1[1], VP2[1] & VP3[1]

[1] Samples were previously qualified due to other QC criteria.

A.2.2 Data Assessment (continued):

TCL BNA - The following compounds were qualified as estimated "J" or rejected "R" because the Continuing Calibration %D is between 25-90% or >90% when the RRF_{50} is > 0.05:

Compound	%D	Qualifier	Associated Sample(s)
2,4-Dinitrophenol	>90%	"R"	VP1, VP2, VP3, VP4, VP5 & VP6
4-Nitrophenol	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
4-chlorophenyl-phenylether	>90%	"R"	VP1, VP2, VP3, VP4, VP5 & VP6
4,6-Dinitro-2-methylphenol	>90%	"R"	VP1, VP2, VP3, VP4, VP5 & VP6
4-Bromophenyl-phenylether	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
Di-n-butylphthalate	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
Butylbenzylphthalate	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
3,3'-Dichlorobenzidine	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
Bis(2-Ethylhexyl)phthalate	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
Indeno(1,2,3-cd)pyrene	>90%	"R"	VP1, VP2, VP3, VP4, VP5 & VP6
Dibenzo(a,h)anthracene	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
Benzo(g,h,i)perylene	between 25-90%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6

Pest/PCBs - The Relative Percent Difference (%RSD) for PEM compound amounts in the continuing calibration verification analyses and/or the RPD amounts in the Individual Standard Mixes of the continuing calibration verification analyses are $\geq$ 25% for either one or both GC columns. The following compounds were either qualified as estimated "J" or rejected "R" due to exceeding Continuing Calibration QC criteria:

Compound	RPD	Qualifier	Associated Sample(s)

Data met QC criteria.

A.2.2 Data Assessment (continued):

6. SURROGATES/SYSTEM MONITORING COMPOUNDS (SMC):

All samples are spiked with surrogate/SMC compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate/SMC concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below. The following analytes for the samples shown were qualified because of surrogate/SMC recovery:

VOA - The following compounds were either qualified as estimated "J" or rejected "R" due to surrogate recovery outside specified QC limits:

Surrogate	Recovery	Qualifier	Compounds	Sample(s)
Toluene-d8	78%	"J"	10	VP3

BNA - The following compounds were either qualified as estimated "J" or rejected "R" due to surrogate recovery outside specified QC limits:

Surrogate	Recovery	Qualifier	Compounds	Sample(s)
Nitrobenzene-d5 &	121/116%	"J"	Dibenzofuran	VP2
2-Fluorobiphenyl	125/121%	"J"	Fluoranthene	VP3

Note: Data were qualified because either two (2) base-neutral and/or two (2) acid compounds have recoveries outside specified QC limits and above 10%, or either one (1) base-neutral and/or one (1) acid compound has a percent recovery below 10%.

Pest/PCBs - The following compounds were either qualified as estimated "J" or rejected "R" due to Tetrachloro-m-xylene (TCX) and Decachlorobiphenyl (DCB) surrogate recoveries are both outside specified advisory QC limits (30-150%):

Surrogate	Recovery	Qualifier	Compounds	Sample(s)

No qualification was required.

A.2.2 Data Assessment (continued):

7. INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to 100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard. If the area count is outside the -50% to 100% range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated "J", and all non-detects as "UJ"only if the IS area is <50% Non-detects are qualified as "R" if there is a severe loss of sensitivity (<25% of associated IS area counts).

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction. The following analytes in the samples shown were qualified because of internal standard performance:

VOA/BNA - The following compounds were either qualified as estimated "J" or rejected "R" in the associated samples due to exceeding Internal Standard (IS) QC criteria (within -50% to + 100% of the Continuing Calibration 12-hour standard):

Internal Standard	Percent IS Area Count of the 12-Hour Standard	Qualifier	Total Analytes Qualified/Sample	Associated Sample(s)

Data met QC criteria.

8. COMPOUND IDENTIFICATION:

A) VOLATILE AND SEMI-VOLATILE FRACTIONS:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the Tentatively Identified Compounds (TICs) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications. The following analytes in the samples shown were qualified for compound identification:

The following compounds were qualified as estimated "J" in the indicated samples because they could not be chromatographically resolved:

Fraction	Compounds	Samples

VOA/BNA:- Data met QC criteria.

A.2.2 Data Assessment (continued):

B) PESTICIDE FRACTION:

The retention time of the reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10 ng/ml in the final sample extract. The percent difference (%D) of the positive results obtained on the two GC columns would be ≤25%. The following analytes in the samples shown were qualified because of compound identification:

Pest/PCBs/Herbicides - The following detected compounds were qualified due to a percent difference (%D) between the primary and confirmation columns > 25%:

Compound	%D	Qualifier	Sample(s)

Data met QC criteria.

9. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for some additional qualification of the data. The following analytes, for the samples shown, were qualified because of MS/MSD:

The laboratory indicated in the case narrative that samples VP5 was used as the original to prepare the duplicate matrix spikes.

TCL - The following sample data were either qualified as estimated "J" or rejected "R" due to exceeding duplicate spike recovery QC criteria:

Fraction	Original Sample	Spike Recovery MS/MSD/RPD	Qualifier	Compound(s)
BNA	VP5	95%/99%	"J"	phenol
		22%/13%/54%	"J"	2,4-Dinitrotoluene

10. OTHER QC DATA OUT OF SPECIFICATION:

TCL - The following compounds were qualified as estimated "J" in the associated aqueous and/or soil/sediment field duplicate samples because the Relative Percent Difference (RPD) between the sample and field duplicate sample is > 50% for aqueous samples, or > 100% for soil/sediment samples:

Fraction	Compound	Matrix	% RPD	Associated Field Duplicate Samples

No qualification required.

A.2.2 Data Assessment (continued):

TCL - The following compounds were qualified as estimated "J" in the indicated samples because the on-column amount of these compounds exceeded the instrument's analytical range as defined by the highest concentration level of the Initial Calibration Sequence:

Fraction	Sample(s)	Compound(s)

No qualification required.

11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT:

Due to professional judgement, the following compounds were not transferred from the indicated dilution sample analyses to the undiluted sample analyses because the reported values of these compounds are either diluted out in the associated dilution sample analyses or are qualified as non-detected "U" due to blank contamination QC criteria:

Fraction	Compound	Dilution Sample(s)	Dilution Factor

Data did not require qualification based on this QC criteria.

Due to professional judgement, the following positive data were qualified as estimated "J" due to possible carryover from a previous sample analysis that contained the compound(s) at high concentration(s):

Fraction	Sample Compound	Sample Compound Concentration	Previous Sample Compound Concentration

Data did not require qualification based on this QC criteria.

12. CONTRACT PROBLEMS____NON-COMPLIANCE:

None

13. This package contain re-extraction, re-analysis or dilution results. Upon reviewing the QA results, the following Form I(s) are identified to be used:

Fraction	Use Sample(s)	Do Not Use Sample(s)
VOA	VP3RE	VP3

OTHER ANALYTES WORK TABLE

PROJECT: VETERAN'S PARK SITE

SAMPLING DATE: AUGUST 16, 2001

SAMPLE #/CONCENTRATION (ug/kg)

Volatiles	Method Detection	SOIL VP1	SOIL VP2	SOIL VP3RE	SOIL VP4	SOIL VP5	SOIL VP6
Low Concentration	Limit	N5598-01	N5598-02	N5598-03RE	N5598-04	N5598-05	N5598-08
Percent Moisture		9	9	11	13	15	12
Dilution Factor		25.0	10.0	1.0	10.0	1.0	1.0
Acetone	10	270 J	100 U J	14 U J	180 U J	12 U J	13 U J
Benzene	10	U	U	U	U	U	U
Bromodichloromethane	10	U	U	U	U	U	U
Bromoform	10	U	U	U	U	U	U
Bromomethane	10	U J	U J	U J	U J	U J	U J
2-Butanone	10	U	U	U	U	U	U
Carbon Disulfide	10	U	U	U	U	U	U
Carbon Tetrachloride	10	U	U	U	U	U	U
Chlorobenzene	10	U	U	U	U	U	U
Chloroethane	10	U J	U J	U J	U J	U J	U J
Chloroform	10	U	U	U	U	U	U
Chloromethane	10	U	U	U	U	U	U
Cyclohexane	10	U	U	U	U	U	U
Dibromochloromethane	10	U	U	U	U	U	U
1,2 - Dibromo-3-Chloropropane	10	U	U	U	U	U	U
1,2 - Dibromoethane	10	U	U	U	U	U	U
1,3, - Dichlorobenzene	10	U	U	U	U	U	U
1,4, - Dichlorobenzene	10	U	U	U	U	U	U
1,2, - Dichlorobenzene	10	U	U	U	U	U	U
Dichlorodifluoromethane	10	U	U	U	U	U	U
1,1-Dichloroethane	10	U	U	U	U	U	U
1,2-Dichloroethane	10	U	U	U	U	U	U
1,1-Dichloroethene	10	U	U	U	U	U	U
Cis-1,2-Dichloroethene	10	U	U	U	U	U	U
trans-1,2-Dichloroethene	10	U	U	U	U	U	U
1,2-Dichloropropane	10	U	U	U	U	U	U
cis-1,3-Dichloropropene	10	U	U	U	U	U	U
trans-1,3-Dichloropropene	10	U	U	U	U	U	U
Ethylbenzene	10	U	U	U	U	U	U
2-Hexanone	10	U	U	U	U	U	U
Isopropylbenzene	10	U	U	U	U	U	U
Methyl Acetate	10	U	U	U	U	U	U
Methylene Chloride	10	71 J	23 J	1.9 J	14 J	1.2 J	1.6 J
Methylcyclohexane	10	U	U	U	U	U	U
4-Methyl-2-Pentanone	10	U	U	U	U	U	U
Methyl tert-Butyl Ether	10	U	U	U	U	U	U
Styrene	10	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	10	U	U	U	U	U	U
1,2,4 - Trichlorobenzene	10	U	U	U	U	U	U
Tetrachloroethene	10	U	U	U	U	U	U
1,1,1-Trichloroethane	10	U	U	U	U	U	U
1,1,2-Trichloroethane	10	U	U	U	U	U	U
Trichloroethene	10	U	U	U	U	U	U
Trichlorofluoromethane	10	U	U	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethan	10	U	U	U	U	U	U
Toluene	10	U	U	U	U	U	U
Vinyl Chloride	10	U	U	U	U	U	U
m/p-Xylenes	10	U	U	U	U	U	U
o-Xylene	10	U	U	U	U	U	U

U - non-detected compound
B - compound detected in the associated Method Blank
J - estimated value
JN - presumptive evidence of a compound at an estimated value
R - rejected compound

OTHER ANALYTES WORK TABLE

PROJECT: VETERAN'S PARK SITE

SAMPLING DATE: AUGUST 16, 2001

SAMPLE #/CONCENTRATION (ug/kg)

Semi-Volatiles	MATRIX	Soil	Soil	Soil	Soil	Soil	Soil
	CLIENT ID	VP1	VP2	VP3	VP4	VP5	VP6
Low Concentration	LAB ID #	N5598-01	N5598-02	N5598-03	N5598-04	N5598-05	N5598-08
Percent Moisture		9	9	11	13	15	12
Dilution Factor/sample wt/vol		1.0/1.0	1.0/1.0	1.0/1.0	1.0/1.0	1.0/1.0	1.0/1.0
	MDL						
Benzaldehyde	330	U	U	U	U	U	U
Phenol	330	750000	540000	84000 J	46000 J	22000 J	28000 J
bis(2-Chloroethyl)ether	330	U	U	U	U	U	U
2-Chlorophenol	330	U	U	U	U	U	U
2-Methylphenol 2800 ppm	330	130000	81000 J	U	U	U	U
2,2'-oxybis(1-Chloropropane)	330	U	U	U	U	U	U
Acetophenone	330	U	U	U	U	U	U
3+4-Methylphenols	330	79000 J	84000 J	U	U	U	U
N-Nitroso-di-n-propylamine	330	U	U	U	U	U	U
Hexachloroethane	330	U	U	U	U	U	U
Nitrobenzene	330	U	U	U	U	U	U
Isophorone	330	U	U	U	U	U	U
2-Nitrophenol	330	U	U	U	U	U	U
2,4-Dimethylphenol 2800 ppm	330	47000 J	61000 J	U	U	U	U
bis(2-Chloroethoxy)methane	330	U	U	U	U	U	U
2,4-Dichlorophenol	330	U	U	U	U	U	U
Naphthalene	330	U	U	U	U	U	U
4-Chloroaniline	330	U	U	U	U	U	U
Hexachlorobutadiene	330	U	U	U	U	U	U
Caprolactam	330	U	U	U	U	U	U
4-Chloro-3-methylphenol	330	U	U	U	U	U	U
2-Methylnaphthalene	330	U	U	U	U	U	U
Hexachlorocyclopentadiene	330	U	U	U	U	U	U
2,4,6-Trichlorophenol	330	U	U	U	U	U	U
2,4,5-Trichlorophenol	830	U	U	U	U	U	U
1 , 1' - Biphenyl	330	U	U	U	U	U	U
2-Chloronaphthalene	330	U	U	U	U	U	U
2-Nitroaniline	830	U	U	U	U	U	U
Dimethylphthalate	330	U	U	U	U	U	U
2,6-Dinitrotoluene	330	U	U	U	U	U	U
Acenaphthylene	330	U	U	U	U	U	U
3-Nitroaniline	830	U	U	U	U	U	U
Acenaphthene	330	U	U	U	U	U	U
2,4-Dinitrophenol	830	R	R	R	R	R	R
4-Nitrophenol	830	U J	U J	U J	U J	U J	U J
Dibenzofuran	330	22000 J	35000 J	U	U	U	U
2,4-Dinitrotoluene	330	U	U	U	U	U J	U
Diethylphthalate	330	U	U	U	U	U	U

U - non-detected compound
B - detected in the corresponding method blank
J - estimated value
JN - presumptive evidence of a compound
at an estimated value
R - rejected compound

OTHER ANALYTES WORK TABLE

PROJECT: VETERAN'S PARK SITE

SAMPLING DATE: AUGUST 16, 2001

SAMPLE #/CONCENTRATION (ug/kg)

Semi-Volatiles Low Concentration	MATRIX CLIENT ID LAB ID #	Soil VP1 N5598-01		Soil VP2 N5598-02		Soil VP3 N5598-03		Soil VP4 N5598-04		Soil VP5 N5598-05		Soil VP6 N5598-08	
Percent Moisture		9		9		11		13		15		12	
Dilution Factor/sample wt/vol		1.0/1.0		1.0/1.0		1.0/1.0		1.0/1.0		1.0/1.0		1.0/1.0	
	MDL												
Fluorene	330	U		U		U		U		U		U	
4-Chlorophenyl-phenylether	330	R		R		R		R		R		R	
4-Nitroaniline	830	U		U		U		U		U		U	
4,6-Dinitro-2-methylphenol	830	R		R		R		R		R		R	
N-Nitrosodiphenylamine	330	U		U		U		U		U		U	
4-Bromophenyl-phenylether	330	U	J	U	J	U	J	U	J	U	J	U	J
Hexachlorobenzene	330	U		U		U		U		U		U	
Atrazine	330	U		U		U		U		U		U	
Pentachlorophenol	830	U		U		U		U		U		U	
Phenanthrene	330	U		U		U		U		U		U	
Anthracene	330	U		U		U		U		U		U	
Carbazole	330	U		U		U		U		U		U	
Di-n-butylphthalate	330	U	J	U	J	U	J	U	J	U	J	U	J
Fluoranthene 100 ppm	330	U		U		48000	J	U		U		U	
Pyrene	330	U		U		U		U		U		U	
Butylbenzylphthalate	330	U	J	U	J	U	J	U	J	U	J	U	J
3,3-Dichlorobenzidine	330	U	J	U	J	U	J	U	J	U	J	U	J
Benzo(a)anthracene	330	U		U		U		U		U		U	
Chrysene	330	U		U		U		U		U		U	
bis(2-Ethylhexyl)phthalate	330	U	J	U	J	U	J	U	J	U	J	U	J
Di-n-octylphthalate	330	U		U		U		U		U		U	
Benzo(b)fluoranthene	330	U		U		U		U		U		U	
Benzo(k)fluoranthene	330	U		U		U		U		U		U	
Benzo(a)pyrene	330	U		U		U		U		U		U	
Indeno(1,2,3-cd)pyrene	330	R		R		R		R		R		R	
Dibenz(a,h)anthracene	330	U	J	U	J	U	J	U	J	U	J	U	J
Benzo(g,h,i)perylene	330	U	J	U	J	U	J	U	J	U	J	U	J

U - non-detected compound
B - detected in the corresponding method blank
J - estimated value
JN - presumptive evidence of a compound
at an estimated value
R - rejected compound

OTHER ANALYTES WORK TABLE

PROJECT: VETERAN'S PARK SITE

SAMPLING DATE: AUGUST 16, 2001

SAMPLE #/CONCENTRATION (µg/Kg)

Pesticides Low Concentration	Method Detection Limit	Soil VP1 N5598-01	Soil VP2 N5598-02	Soil VP3 N5598-03	Soil VP4 N5598-04	Soil VP5 N5598-05	Soil VP6 N5598-08
Percent Moisture		9	9	11	13	14	12
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0
alpha-BHC	50	U	U	U	U	U	U
beta-BHC	50	U	U	U	U	U	U
delta-BHC	50	U	U	U	U	U	U
gamma-BHC (Lindane)	50	U	U	U	U	U	U
Heptachlor	50	U	U	U	U	U	U
Aldrin	50	U	U	U	U	U	U
Heptachlor Epoxide	50	U	U	U	U	U	U
Endosulfan I	50	U	U	U	U	U	U
Dieldrin	50	U	U	U	U	U	U
4,4'-DDE	50	U	U	U	U	U	U
Endrin	50	U	U	U	U	U	U
Endosulfan II	50	U	U	U	U	U	U
4,4'-DDD	50	U	U	U	U	U	U
Endosulfan Sulfate	50	U	U	U	U	U	U
4,4'-DDT	50	U	U	U	U	U	U
Methoxychlor	50	U	U	U	U	U	U
Endrin Ketone	50	U	U	U	U	U	U
Endrin Aldehyde	50	U	U	U	U	U	U
alpha-Chlordane	50	U	U	U	U	U	U
gamma-Chlordane	50	U	U	U	U	U	U
Toxaphene	500	U	U	U	U	U	U
Aroclor-1016	500	U	U	U	U	U	U
Aroclor-1221	500	U	U	U	U	U	U
Aroclor-1232	500	U	U	U	U	U	U
Aroclor-1242	500	U	U	U	U	U	U
Aroclor-1248	500	U	U	U	U	U	U
Aroclor-1254	500	U	U	U	U	U	U
Aroclor-1260	500	U	U	U	U	U	U

U - non-detected compound
B - detected in the corresponding method blank
J - estimated value
JN - presumptive evidence of a compound at an estimated value
R - rejected compound

CHEMTECH

CASE NARRATIVE

Roy F. Weston, INC
RFP # 2057
PO # 0027708
Chemtech Project # N5598LP

A. Number of Samples and Date of Receipt
6 Soil Samples plus An MS/MSD were delivered to the laboratory intact on 08/16/01.

B. Parameters
Tests requested were Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Metals & General Chemistry. This Case Narrative reviews results for Volatile Organics.

C. Analytical Techniques:
Samples were analyzed for Volatile Organics according to Method 8260. The analyses were performed on instrument MSVOA B, using GC column RTX624 which is 75 meters, 0.53mm ID, 3.0mm DF (crossbond 6% cyanopropylphenyl-94% dimethylpolysiloxane). The Purge Trap was supplied by Supelco, VO CARB 3000, Tekmar 3000.

D. QA/ QC Samples:
System Monitoring Compound recoveries met requirements except for VP3. MS/MSD recoveries and RPDs met requirements. Holding Times were met. Internal Standard Areas and Retention Times were within QC limits. Calibrations met requirements. Blank analyses did not indicate the presence of contamination except for Acetone for VBLK01 and VBLK02.

E. Additional Comments:
Samples were diluted due to Organic "like" Matrix.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature Mildred V. Reyes Name: Mildred V. Reyes

Date: 11/6/01 (modified) Title: QA/QC

002
MR 11/6/01

CHEMTECH

CASE NARRATIVE

Roy F. Weston, INC
RFP NO: 2057
PO # 0027708
Chemtech Project # N5598LP

A. Number of Samples and Date of Receipt
6 Soil Samples Plus An MS/MSD were delivered to the laboratory intact on 08/16/01.

B. Parameters
Tests requested were Volatile Organics, Semivolatile, Pesticides, PCBs, Metals & General Chemistry. This Case Narrative reviews results for Volatile Organics.

C. Analytical Techniques:
Samples were analyzed for Volatile Organics according to Method 8260. The analyses were performed on instrument MSVOA B, using GC column RTX624 which is 75 meters, 0.53mm ID, 3.0mm DF (crossbond 6% cyanopropylphenyl-94% dimethylpolysiloxane). The Purge Trap was supplied by Supelco, VO CARB 3000, Tekmar 3000.

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I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature Mildred V Reyes Name: Mildred V. Reyes

Date: 9/12/2001 Title: QA/QC

002
MR 9/12/01

CHEMTECH

284, Sheffield Street Mountainside NJ 07092
Tel: 908-789-8900 Fax: 908-789-8922

COVER PAGE

ProjectID: RFP 2057

Order N5598 **CustomerName** Roy F. Weston, Inc.

LAB SAMPLE NO.	CLIENT SAMPLE NO
N5598-01	VP1
N5598-02	VP2
N5598-03	VP3
N5598-04	VP4
N5598-05	VP5
N5598-06	VP5MS
N5598-07	VP5MSD
N5598-08	VP6

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: Hildred V. Reyes Name: Hildred V. Reyes

Date: 9/12/01 Title: QA/QC

NYDOH CERTIFICATION NO.11376 NJDEP CERTIFICATION NO. 12013

CHEMTECH

284 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP1

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082906.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 9 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	140	U
75-01-4	Vinyl Chloride	140	U
74-83-9	Bromomethane	140	U J
75-00-3	Chloroethane	140	U J
75-35-4	1,1-Dichloroethene	140	U
67-64-1	Acetone	270	~~B~~ J
75-15-0	Carbon Disulfide	140	U
75-09-2	Methylene Chloride	71	~~J~~ J
156-60-5	trans-1,2-Dichloroethene	140	U
75-34-3	1,1-Dichloroethane	140	U
78-93-3	2-Butanone	140	U
156-59-2	cis-1,2-Dichloroethene	140	U
67-66-3	Chloroform	140	U
71-55-6	1,1,1-Trichloroethane	140	U
56-23-5	Carbon Tetrachloride	140	U
71-43-2	Benzene	140	U
107-06-2	1,2-Dichloroethane	140	U
79-01-6	Trichloroethene	140	U
78-87-5	1,2-Dichloropropane	140	U
75-27-4	Bromodichloromethane	140	U
108-10-1	4-Methyl-2-Pentanone	140	U
108-88-3	Toluene	140	U
10061-02-6	t-1,3-Dichloropropene	140	U
10061-01-5	cis-1,3-Dichloropropene	140	U
79-00-5	1,1,2-Trichloroethane	140	U
591-78-6	2-Hexanone	140	U
124-48-1	Dibromochloromethane	140	U
127-18-4	Tetrachloroethene	140	U
108-90-7	Chlorobenzene	140	U
100-41-4	Ethyl Benzene	140	U
136777-61-2	m/p-Xylenes	140	U
95-47-6	o-Xylene	140	U
100-42-5	Styrene	140	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP1

Lab Name: CHEMTECH   Contract: ROY F. WESTON, INC.

Project No.: N5598   Site: RFP 2057   Location: LB15833   Group: 5971-VOA

Matrix: (soil/water) SOIL   Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G   Lab File ID: VB082906.D

Level: (low/med) LOW   Date Received: 8/16/01

% Moisture: not dec. 9   Date Analyzed: 8/29/01

GC Column: RTX624   ID: 0.53 (mm)   Dilution Factor: 25.0

Soil Extract Volume: ______ (uL)   Soil Aliquot Volume: ______ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	140	U
79-34-5	1,1,2,2-Tetrachloroethane	140	U

1E

SAMPLE NO.

VP1

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No. N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082906.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 9.2 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 6 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
~~1. 108-95-2~~	~~Phenol~~	~~21.21~~	~~3900~~	~~J~~ R
~~2.~~	~~Column Bleed~~	~~22.57~~	~~160~~	~~J~~ R
3. 95-48-7	Phenol, 2-methyl-	23.03	680	J N
4. 95-87-4	Phenol, 2,5-dimethyl-	24.03	340	J N
5. 539-80-0	2,4,6-Cycloheptatrien-1-one	24.43	340	J N
6. 101-84-8	Diphenyl ether	31.88	510	J N
7.				
8.				
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30.				

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP2

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082905.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 9 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	55	U
75-01-4	Vinyl Chloride	55	U
74-83-9	Bromomethane	55	U J
75-00-3	Chloroethane	55	U J
75-35-4	1,1-Dichloroethene	55	U
67-64-1	Acetone	100 U	J
75-15-0	Carbon Disulfide	55	U
75-09-2	Methylene Chloride	23	J
156-60-5	trans-1,2-Dichloroethene	55	U
75-34-3	1,1-Dichloroethane	55	U
78-93-3	2-Butanone	55	U
156-59-2	cis-1,2-Dichloroethene	55	U
67-66-3	Chloroform	55	U
71-55-6	1,1,1-Trichloroethane	55	U
56-23-5	Carbon Tetrachloride	55	U
71-43-2	Benzene	55	U
107-06-2	1,2-Dichloroethane	55	U
79-01-6	Trichloroethene	55	U
78-87-5	1,2-Dichloropropane	55	U
75-27-4	Bromodichloromethane	55	U
108-10-1	4-Methyl-2-Pentanone	55	U
108-88-3	Toluene	55	U
10061-02-6	t-1,3-Dichloropropene	55	U
10061-01-5	cis-1,3-Dichloropropene	55	U
79-00-5	1,1,2-Trichloroethane	55	U
591-78-6	2-Hexanone	55	U
124-48-1	Dibromochloromethane	55	U
127-18-4	Tetrachloroethene	55	U
108-90-7	Chlorobenzene	55	U
100-41-4	Ethyl Benzene	55	U
136777-61-2	m/p-Xylenes	55	U
95-47-6	o-Xylene	55	U
100-42-5	Styrene	55	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP2

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082905.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 9 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	55	U
79-34-5	1,1,2,2-Tetrachloroethane	55	U

1E

SAMPLE NO.

VP2

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No. N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082905.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 9 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units:

Number TICs found: 7 (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 115-11-7	1-Propene, 2-methyl-	1.83	64	J N
2. 98-67-9	Benzenesulfonic acid, 4-hydr	21.21	840	J N
3. 95-48-7	Phenol, 2-methyl-	23.05	140	J N
4. 526-75-0	Phenol, 2,3-dimethyl-	24.03	78	J N
5. 553-86-6	2-Coumaranone	24.43	220	J N
6. 585-34-2	Phenol, m-tert-butyl-	30.42	74	J N
7. 101-84-8	Diphenyl ether	31.90	410	J N
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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP3

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082904.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 11 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

DO not use this data

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	5.6	U
75-01-4	Vinyl Chloride	5.6	U
74-83-9	Bromomethane	5.6	U UJ
75-00-3	Chloroethane	5.6	U UJ
75-35-4	1,1-Dichloroethene	5.6	U
67-64-1	Acetone	11 U	~~J~~ UJ
75-15-0	Carbon Disulfide	5.6	U
75-09-2	Methylene Chloride	2.3	~~J~~ UJ
156-60-5	trans-1,2-Dichloroethene	5.6	U
75-34-3	1,1-Dichloroethane	5.6	U
78-93-3	2-Butanone	5.6	U
156-59-2	cis-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
71-43-2	Benzene	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
79-01-6	Trichloroethene	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
75-27-4	Bromodichloromethane	5.6	U
108-10-1	4-Methyl-2-Pentanone	5.6	U UJ
108-88-3	Toluene	5.6	U UJ
10061-02-6	t-1,3-Dichloropropene	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
591-78-6	2-Hexanone	5.6	U UJ
124-48-1	Dibromochloromethane	5.6	U
127-18-4	Tetrachloroethene	5.6	U UJ
108-90-7	Chlorobenzene	5.6	U UJ
100-41-4	Ethyl Benzene	5.6	U UJ
136777-61-2	m/p-Xylenes	5.6	U UJ
95-47-6	o-Xylene	5.6	U UJ
100-42-5	Styrene	5.6	U UJ

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP3

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082904.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 11 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U J

Do not use this data

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
VP3

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No. N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082904.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 10.7 Date Analyzed: 8/29/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/Kg

	CAS Number	Compound Name	RT	Est. Conc.	Q
1.	115-11-7	1-Propene, 2-methyl-	1.81	12	JN
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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP3RE

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082811.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 11 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	5.6	U
75-01-4	Vinyl Chloride	5.6	U
74-83-9	Bromomethane	5.6	U J
75-00-3	Chloroethane	5.6	U J
75-35-4	1,1-Dichloroethene	5.6	U
67-64-1	Acetone	14 U	~~J~~ J
75-15-0	Carbon Disulfide	5.6	U
75-09-2	Methylene Chloride	1.9	~~J~~ J
156-60-5	trans-1,2-Dichloroethene	5.6	U
75-34-3	1,1-Dichloroethane	5.6	U
78-93-3	2-Butanone	5.6	U
156-59-2	cis-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
71-43-2	Benzene	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
79-01-6	Trichloroethene	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
75-27-4	Bromodichloromethane	5.6	U
108-10-1	4-Methyl-2-Pentanone	5.6	U
108-88-3	Toluene	5.6	U
10061-02-6	t-1,3-Dichloropropene	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
591-78-6	2-Hexanone	5.6	U
124-48-1	Dibromochloromethane	5.6	U
127-18-4	Tetrachloroethene	5.6	U
108-90-7	Chlorobenzene	5.6	U
100-41-4	Ethyl Benzene	5.6	U
136777-61-2	m/p-Xylenes	5.6	U
95-47-6	o-Xylene	5.6	U
100-42-5	Styrene	5.6	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP3RE

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082811.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 11 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U

1E

SAMPLE NO.

VP3RE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No. N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O03RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082811.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 10.7 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 115-11-7	1-Propene, 2-methyl-	1.83	9.4	JN
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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP4

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082810.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 13 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg		Q
74-87-3	Chloromethane	57		U
75-01-4	Vinyl Chloride	57		U
74-83-9	Bromomethane	57		U J
75-00-3	Chloroethane	57		U J
75-35-4	1,1-Dichloroethene	57		U
67-64-1	Acetone	180	U	B J
75-15-0	Carbon Disulfide	57		U
75-09-2	Methylene Chloride	14		J
156-60-5	trans-1,2-Dichloroethene	57		U
75-34-3	1,1-Dichloroethane	57		U
78-93-3	2-Butanone	57		U
156-59-2	cis-1,2-Dichloroethene	57		U
67-66-3	Chloroform	57		U
71-55-6	1,1,1-Trichloroethane	57		U
56-23-5	Carbon Tetrachloride	57		U
71-43-2	Benzene	57		U
107-06-2	1,2-Dichloroethane	57		U
79-01-6	Trichloroethene	57		U
78-87-5	1,2-Dichloropropane	57		U
75-27-4	Bromodichloromethane	57		U
108-10-1	4-Methyl-2-Pentanone	57		U
108-88-3	Toluene	57		U
10061-02-6	t-1,3-Dichloropropene	57		U
10061-01-5	cis-1,3-Dichloropropene	57		U
79-00-5	1,1,2-Trichloroethane	57		U
591-78-6	2-Hexanone	57		U
124-48-1	Dibromochloromethane	57		U
127-18-4	Tetrachloroethene	57		U
108-90-7	Chlorobenzene	57		U
100-41-4	Ethyl Benzene	57		U
136777-61-2	m/p-Xylenes	57		U
95-47-6	o-Xylene	57		U
100-42-5	Styrene	57		U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP4

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082810.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 13 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	57	U
79-34-5	1,1,2,2-Tetrachloroethane	57	U

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SAMPLE NO.

VP4

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No. N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082810.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 12.8 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 6 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 115-11-7	1-Propene, 2-methyl-	1.83	89	J N
2. 107-39-1	1-Pentene, 2,4,4-trimethyl-	7.61	1100	J N
3. 107-40-4	2-Pentene, 2,4,4-trimethyl-	8.09	440	J N
4.	Unknown	8.40	150	J
5. 690-92-6	3-Hexene, 2,2-dimethyl-, (Z)	8.66	140	J N
6. 565-77-5	2-Pentene, 2,3,4-trimethyl-	9.16	190	J N
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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP5

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082814.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 15 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	5.8	U
75-01-4	Vinyl Chloride	5.8	U
74-83-9	Bromomethane	5.8	U J
75-00-3	Chloroethane	5.8	U J
75-35-4	1,1-Dichloroethene	5.8	U
67-64-1	Acetone	12 U	~~B~~ J
75-15-0	Carbon Disulfide	5.8	U
75-09-2	Methylene Chloride	1.2	~~J~~ J
156-60-5	trans-1,2-Dichloroethene	5.8	U
75-34-3	1,1-Dichloroethane	5.8	U
78-93-3	2-Butanone	5.8	U
156-59-2	cis-1,2-Dichloroethene	5.8	U
67-66-3	Chloroform	5.8	U
71-55-6	1,1,1-Trichloroethane	5.8	U
56-23-5	Carbon Tetrachloride	5.8	U
71-43-2	Benzene	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
79-01-6	Trichloroethene	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U
75-27-4	Bromodichloromethane	5.8	U
108-10-1	4-Methyl-2-Pentanone	5.8	U
108-88-3	Toluene	5.8	U
10061-02-6	t-1,3-Dichloropropene	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
591-78-6	2-Hexanone	5.8	U
124-48-1	Dibromochloromethane	5.8	U
127-18-4	Tetrachloroethene	5.8	U
108-90-7	Chlorobenzene	5.8	U
100-41-4	Ethyl Benzene	5.8	U
136777-61-2	m/p-Xylenes	5.8	U
95-47-6	o-Xylene	5.8	U
100-42-5	Styrene	5.8	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP5

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082814.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 15 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	5.8	U
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U

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SAMPLE NO.

VP5 -

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No. N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082814.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 14.5 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 2 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. ~~108-95-2~~	~~Phenol~~	~~21.24~~	~~9.5~~	~~J~~ R
2.	~~Column-Bleed~~	~~22.58~~	~~6.4~~	~~J~~ R
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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP6

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082809.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 12 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	5.7	U
75-01-4	Vinyl Chloride	5.7	U
74-83-9	Bromomethane	5.7	U
75-00-3	Chloroethane	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
67-64-1	Acetone	13 U	BJ
75-15-0	Carbon Disulfide	5.7	U
75-09-2	Methylene Chloride	1.6	BJ
156-60-5	trans-1,2-Dichloroethene	5.7	U
75-34-3	1,1-Dichloroethane	5.7	U
78-93-3	2-Butanone	5.7	U
156-59-2	cis-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
71-43-2	Benzene	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
79-01-6	Trichloroethene	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
75-27-4	Bromodichloromethane	5.7	U
108-10-1	4-Methyl-2-Pentanone	5.7	U
108-88-3	Toluene	5.7	U
10061-02-6	t-1,3-Dichloropropene	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
591-78-6	2-Hexanone	5.7	U
124-48-1	Dibromochloromethane	5.7	U
127-18-4	Tetrachloroethene	5.7	U
108-90-7	Chlorobenzene	5.7	U
100-41-4	Ethyl Benzene	5.7	U
136777-61-2	m/p-Xylenes	5.7	U
95-47-6	o-Xylene	5.7	U
100-42-5	Styrene	5.7	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP6

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O08

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082809.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 12 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	5.7	U
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U

1E

SAMPLE NO.

VP6

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CHEMTECH Contract: ROY F. WESTON, INC.

Project No. N5598 Site: RFP 2057 Location: LB15833 Group: 5971-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VB082809.D

Level: (low/med) LOW Date Received: 8/16/01

% Moisture: not dec. 12.1 Date Analyzed: 8/28/01

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
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30.				

CHEMTECH

CASE NARRATIVE

Roy F. Weston, INC
RFP # 2057
PO # 0027708
Chemtech Project # N5598LP

A. Number of Samples and Date of Receipt
6 Soil Samples plus An MS/MSD were delivered to the laboratory intact on 08/16/01.

B. Parameters
Tests requested were Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Metals & General Chemistry. This Case Narrative reviews results for Semivolatile Organics.

C. Analytical Techniques:
The analysis of Semivolatile Organics is based on Method 8270. The samples were analyzed on instrument MSBNA C using GC Column RTX 5 MS which is 30 meters, 0.25mm ID, 0.25mm DF (crossbond 5% diphenyl-95% dimethyl polysiloxane).

D. QA/ QC Samples:
Surrogate recoveries did not meet requirements except for SBLK01 and BLKSK-1. Matrix Spike recovery of Phenol, 1,2,4-Trichlorobenzene, 4-Chloro-3-methylphenol and 2,4-Dinitrotoluene did not meet requirements. Matrix Spike Duplicate recovery of Phenol, 1,4-Dichlorobenzene, 1,2,4-Trichlirobenzene, 4-Chloro-3-methylphenol and 2M4-Dinitrotluene did not meet requirements. RPDs met requirements except for 2,4-Dinitrotluene. Holding Times were met. Tuning Checks met requirements. Internal Standard Areas met requirements except for VP5MS and VP5MSD. Retention Times met requirements. Calibrations met requirements. Blank analyses did not indicate the presence of contamination.

E. Additional Comments:
Samples weight were reduce due to Matrix interference. Samples could not be extracted using solid extraction Method waste dilution Method was instead. No Clean up is required for waste dilution therefore none was applied.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature Mildred V. Reyes Name: Mildred V. Reyes

Date: 9/12/01 Title: QA/QC

received 11/5/01 (MR)

002
MR 11/5/01

CHEMTECH

284 Sheffield Street, Mountainside, NJ 07092
Tel 908-789-8900 Fax 908-789-8922

Calculations for VOA, SVOC and Pest/PCB

VOA & SVOC

$$\text{Conc of analyte} = \frac{(\text{Area of Compound}) \times (\text{conc of ISTD})}{(\text{Area of ISTD}) \times (\text{RF of Compound})} \times \text{Dilution factor}$$

ISTD= internal standard
RF= response factor

PEST/PCB

$$\text{Conc of analyte} = \frac{(\text{Area of Compound}) \times (\text{Final volume})}{(\text{Calibration Factor of Mid point standard}) \times (\text{initial volume})} \times \text{Dilution factor}$$

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284, Sheffield Street Mountainside NJ 07092
Tel: 908-789-8900 Fax: 908-789-8922

COVER PAGE

ProjectID: RFP 2057

Order N5598

CustomerName Roy F. Weston, Inc.

LAB SAMPLE NO.	CLIENT SAMPLE NO
N5598-01	VP1
N5598-02	VP2
N5598-03	VP3
N5598-04	VP4
N5598-05	VP5
N5598-06	VP5MS
N5598-07	VP5MSD
N5598-08	VP6

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: Mildred V. Reyes Name: Mildred V. Reyes

Date: 9/12/01 Title: DA/QC

NYDOH CERTIFICATION NO.11376

NJDEP CERTIFICATION NO. 12013

CHEMTECH

284 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP1

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: O01

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082805.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 9 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	750000	
111-44-4	bis(2-Chloroethyl)ether	110000	U
95-57-8	2-Chlorophenol	110000	U
95-50-1	1,2-Dichlorobenzene	110000	U
541-73-1	1,3-Dichlorobenzene	110000	U
106-46-7	1,4-Dichlorobenzene	110000	U
95-48-7	2-Methylphenol	130000	
108-60-1	2,2'-oxybis(1-Chloropropane)	110000	U
65794-96-9	3+4-Methylphenols	79000	J
621-64-7	n-Nitroso-di-n-propylamine	110000	U
67-72-1	Hexachloroethane	110000	U
98-95-3	Nitrobenzene	110000	U
78-59-1	Isophorone	110000	U
88-75-5	2-Nitrophenol	110000	U
105-67-9	2,4-Dimethylphenol	47000	J
111-91-1	bis(2-Chloroethoxy)methane	110000	U
120-83-2	2,4-Dichlorophenol	110000	U
120-82-1	1,2,4-Trichlorobenzene	110000	U
91-20-3	Naphthalene	110000	U
106-47-8	4-Chloroaniline	110000	U
87-68-3	Hexachlorobutadiene	110000	U
59-50-7	4-Chloro-3-methylphenol	110000	U
91-57-6	2-Methylnaphthalene	110000	U
77-47-4	Hexachlorocyclopentadiene	110000	U
88-06-2	2,4,6-Trichlorophenol	110000	U
95-95-4	2,4,5-Trichlorophenol	110000	U
91-58-7	2-Chloronaphthalene	110000	U
88-74-4	2-Nitroaniline	110000	U
131-11-3	Dimethylphthalate	110000	U
208-96-8	Acenaphthylene	110000	U
606-20-2	2,6-Dinitrotoluene	110000	U
99-09-2	3-Nitroaniline	110000	U
83-32-9	Acenaphthene	110000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP1

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: 001

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082805.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 9 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	110000	~~U~~ R
100-02-7	4-Nitrophenol	110000	U J
132-64-9	Dibenzofuran	22000	J
121-14-2	2,4-Dinitrotoluene	110000	U
84-66-2	Diethylphthalate	110000	U
7005-72-3	4-Chlorophenyl-phenylether	110000	~~U~~ R
86-73-7	Fluorene	110000	U
100-01-6	4-Nitroaniline	110000	U
534-52-1	4,6-Dinitro-2-methylphenol	110000	~~U~~ R
86-30-6	n-Nitrosodiphenylamine	110000	U
101-55-3	4-Bromophenyl-phenylether	110000	U J
118-74-1	Hexachlorobenzene	110000	U
87-86-5	Pentachlorophenol	110000	U
85-01-8	Phenanthrene	110000	U
120-12-7	Anthracene	110000	U
86-74-8	Carbazole	110000	U
84-74-2	Di-n-butylphthalate	110000	U J
206-44-0	Fluoranthene	110000	U
129-00-0	Pyrene	110000	U
85-68-7	Butylbenzylphthalate	110000	U J
91-94-1	3,3'-Dichlorobenzidine	110000	U J
56-55-3	Benzo(a)anthracene	110000	U
218-01-9	Chrysene	110000	U
117-81-7	Bis(2-Ethylhexyl)phthalate	110000	U J
117-84-0	Di-n-octyl phthalate	110000	U
205-99-2	Benzo(b)fluoranthene	110000	U
207-08-9	Benzo(k)fluoranthene	110000	U
50-32-8	Benzo(a)pyrene	110000	U
193-39-5	Indeno(1,2,3-cd)pyrene	110000	~~U~~ R
53-70-3	Dibenzo(a,h)anthracene	110000	U J
191-24-2	Benzo(g,h,i)perylene	110000	U J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP2

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: 002

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082806.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 9 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	540000	
111-44-4	bis(2-Chloroethyl)ether	110000	U
95-57-8	2-Chlorophenol	110000	U
95-50-1	1,2-Dichlorobenzene	110000	U
541-73-1	1,3-Dichlorobenzene	110000	U
106-46-7	1,4-Dichlorobenzene	110000	U
95-48-7	2-Methylphenol	81000	J
108-60-1	2,2'-oxybis(1-Chloropropane)	110000	U
65794-96-9	3+4-Methylphenols	84000	J
621-64-7	n-Nitroso-di-n-propylamine	110000	U
67-72-1	Hexachloroethane	110000	U
98-95-3	Nitrobenzene	110000	U
78-59-1	Isophorone	110000	U
88-75-5	2-Nitrophenol	110000	U
105-67-9	2,4-Dimethylphenol	61000	J
111-91-1	bis(2-Chloroethoxy)methane	110000	U
120-83-2	2,4-Dichlorophenol	110000	U
120-82-1	1,2,4-Trichlorobenzene	110000	U
91-20-3	Naphthalene	110000	U
106-47-8	4-Chloroaniline	110000	U
87-68-3	Hexachlorobutadiene	110000	U
59-50-7	4-Chloro-3-methylphenol	110000	U
91-57-6	2-Methylnaphthalene	110000	U
77-47-4	Hexachlorocyclopentadiene	110000	U
88-06-2	2,4,6-Trichlorophenol	110000	U
95-95-4	2,4,5-Trichlorophenol	110000	U
91-58-7	2-Chloronaphthalene	110000	U
88-74-4	2-Nitroaniline	110000	U
131-11-3	Dimethylphthalate	110000	U
208-96-8	Acenaphthylene	110000	U
606-20-2	2,6-Dinitrotoluene	110000	U
99-09-2	3-Nitroaniline	110000	U
83-32-9	Acenaphthene	110000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP2

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTEHR Lab Sample ID: O02

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082806.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 9 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	110000	~~U~~ R
100-02-7	4-Nitrophenol	110000	U J
132-64-9	Dibenzofuran	35000	~~J~~ J
121-14-2	2,4-Dinitrotoluene	110000	U
84-66-2	Diethylphthalate	110000	U
7005-72-3	4-Chlorophenyl-phenylether	110000	~~U~~ R
86-73-7	Fluorene	110000	U
100-01-6	4-Nitroaniline	110000	U
534-52-1	4,6-Dinitro-2-methylphenol	110000	~~U~~ R
86-30-6	n-Nitrosodiphenylamine	110000	U
101-55-3	4-Bromophenyl-phenylether	110000	U J
118-74-1	Hexachlorobenzene	110000	U
87-86-5	Pentachlorophenol	110000	U
85-01-8	Phenanthrene	110000	U
120-12-7	Anthracene	110000	U
86-74-8	Carbazole	110000	U
84-74-2	Di-n-butylphthalate	110000	U J
206-44-0	Fluoranthene	110000	U
129-00-0	Pyrene	110000	U
85-68-7	Butylbenzylphthalate	110000	U J
91-94-1	3,3'-Dichlorobenzidine	110000	U J
56-55-3	Benzo(a)anthracene	110000	U
218-01-9	Chrysene	110000	U
117-81-7	Bis(2-Ethylhexyl)phthalate	110000	U J
117-84-0	Di-n-octyl phthalate	110000	U
205-99-2	Benzo(b)fluoranthene	110000	U
207-08-9	Benzo(k)fluoranthene	110000	U
50-32-8	Benzo(a)pyrene	110000	U
193-39-5	Indeno(1,2,3-cd)pyrene	110000	~~U~~ R
53-70-3	Dibenzo(a,h)anthracene	110000	U J
191-24-2	Benzo(g,h,i)perylene	110000	U J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP3

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: 003

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082807.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 11 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	84000	J
111-44-4	bis(2-Chloroethyl)ether	110000	U
95-57-8	2-Chlorophenol	110000	U
95-50-1	1,2-Dichlorobenzene	110000	U
541-73-1	1,3-Dichlorobenzene	110000	U
106-46-7	1,4-Dichlorobenzene	110000	U
95-48-7	2-Methylphenol	110000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	110000	U
65794-96-9	3+4-Methylphenols	220000	U
621-64-7	n-Nitroso-di-n-propylamine	110000	U
67-72-1	Hexachloroethane	110000	U
98-95-3	Nitrobenzene	110000	U
78-59-1	Isophorone	110000	U
88-75-5	2-Nitrophenol	110000	U
105-67-9	2,4-Dimethylphenol	110000	U
111-91-1	bis(2-Chloroethoxy)methane	110000	U
120-83-2	2,4-Dichlorophenol	110000	U
120-82-1	1,2,4-Trichlorobenzene	110000	U
91-20-3	Naphthalene	110000	U
106-47-8	4-Chloroaniline	110000	U
87-68-3	Hexachlorobutadiene	110000	U
59-50-7	4-Chloro-3-methylphenol	110000	U
91-57-6	2-Methylnaphthalene	110000	U
77-47-4	Hexachlorocyclopentadiene	110000	U
88-06-2	2,4,6-Trichlorophenol	110000	U
95-95-4	2,4,5-Trichlorophenol	110000	U
91-58-7	2-Chloronaphthalene	110000	U
88-74-4	2-Nitroaniline	110000	U
131-11-3	Dimethylphthalate	110000	U
208-96-8	Acenaphthylene	110000	U
606-20-2	2,6-Dinitrotoluene	110000	U
99-09-2	3-Nitroaniline	110000	U
83-32-9	Acenaphthene	110000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP3

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: O03

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082807.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 11 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	110000	~~U~~ R
100-02-7	4-Nitrophenol	110000	U J
132-64-9	Dibenzofuran	110000	U
121-14-2	2,4-Dinitrotoluene	110000	U
84-66-2	Diethylphthalate	110000	U
7005-72-3	4-Chlorophenyl-phenylether	110000	~~U~~ R
86-73-7	Fluorene	110000	U
100-01-6	4-Nitroaniline	110000	U
534-52-1	4,6-Dinitro-2-methylphenol	110000	~~U~~ R
86-30-6	n-Nitrosodiphenylamine	110000	U
101-55-3	4-Bromophenyl-phenylether	110000	U J
118-74-1	Hexachlorobenzene	110000	U
87-86-5	Pentachlorophenol	110000	U
85-01-8	Phenanthrene	110000	U
120-12-7	Anthracene	110000	U
86-74-8	Carbazole	110000	U
84-74-2	Di-n-butylphthalate	110000	U J
206-44-0	Fluoranthene	48000	~~J~~ J
129-00-0	Pyrene	110000	U
85-68-7	Butylbenzylphthalate	110000	U J
91-94-1	3,3'-Dichlorobenzidine	110000	U J
56-55-3	Benzo(a)anthracene	110000	U
218-01-9	Chrysene	110000	U
117-81-7	Bis(2-Ethylhexyl)phthalate	110000	U J
117-84-0	Di-n-octyl phthalate	110000	U
205-99-2	Benzo(b)fluoranthene	110000	U
207-08-9	Benzo(k)fluoranthene	110000	U
50-32-8	Benzo(a)pyrene	110000	U
193-39-5	Indeno(1,2,3-cd)pyrene	110000	~~U~~ R
53-70-3	Dibenzo(a,h)anthracene	110000	U J
191-24-2	Benzo(g,h,i)perylene	110000	U J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP4 -

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: O04

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082808.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 13 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	46000	J
111-44-4	bis(2-Chloroethyl)ether	110000	U
95-57-8	2-Chlorophenol	110000	U
95-50-1	1,2-Dichlorobenzene	110000	U
541-73-1	1,3-Dichlorobenzene	110000	U
106-46-7	1,4-Dichlorobenzene	110000	U
95-48-7	2-Methylphenol	110000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	110000	U
65794-96-9	3+4-Methylphenols	230000	U
621-64-7	n-Nitroso-di-n-propylamine	110000	U
67-72-1	Hexachloroethane	110000	U
98-95-3	Nitrobenzene	110000	U
78-59-1	Isophorone	110000	U
88-75-5	2-Nitrophenol	110000	U
105-67-9	2,4-Dimethylphenol	110000	U
111-91-1	bis(2-Chloroethoxy)methane	110000	U
120-83-2	2,4-Dichlorophenol	110000	U
120-82-1	1,2,4-Trichlorobenzene	110000	U
91-20-3	Naphthalene	110000	U
106-47-8	4-Chloroaniline	110000	U
87-68-3	Hexachlorobutadiene	110000	U
59-50-7	4-Chloro-3-methylphenol	110000	U
91-57-6	2-Methylnaphthalene	110000	U
77-47-4	Hexachlorocyclopentadiene	110000	U
88-06-2	2,4,6-Trichlorophenol	110000	U
95-95-4	2,4,5-Trichlorophenol	110000	U
91-58-7	2-Chloronaphthalene	110000	U
88-74-4	2-Nitroaniline	110000	U
131-11-3	Dimethylphthalate	110000	U
208-96-8	Acenaphthylene	110000	U
606-20-2	2,6-Dinitrotoluene	110000	U
99-09-2	3-Nitroaniline	110000	U
83-32-9	Acenaphthene	110000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP4

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: 004

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082808.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 13 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	110000	~~U~~ R
100-02-7	4-Nitrophenol	110000	U J
132-64-9	Dibenzofuran	110000	U
121-14-2	2,4-Dinitrotoluene	110000	U
84-66-2	Diethylphthalate	110000	U
7005-72-3	4-Chlorophenyl-phenylether	110000	~~U~~ R
86-73-7	Fluorene	110000	U
100-01-6	4-Nitroaniline	110000	U
534-52-1	4,6-Dinitro-2-methylphenol	110000	~~U~~ R
86-30-6	n-Nitrosodiphenylamine	110000	U
101-55-3	4-Bromophenyl-phenylether	110000	U J
118-74-1	Hexachlorobenzene	110000	U
87-86-5	Pentachlorophenol	110000	U
85-01-8	Phenanthrene	110000	U
120-12-7	Anthracene	110000	U
86-74-8	Carbazole	110000	U
84-74-2	Di-n-butylphthalate	110000	U J
206-44-0	Fluoranthene	110000	U
129-00-0	Pyrene	110000	U
85-68-7	Butylbenzylphthalate	110000	U J
91-94-1	3,3'-Dichlorobenzidine	110000	U J
56-55-3	Benzo(a)anthracene	110000	U
218-01-9	Chrysene	110000	U
117-81-7	Bis(2-Ethylhexyl)phthalate	110000	U J
117-84-0	Di-n-octyl phthalate	110000	U
205-99-2	Benzo(b)fluoranthene	110000	U
207-08-9	Benzo(k)fluoranthene	110000	U
50-32-8	Benzo(a)pyrene	110000	U
193-39-5	Indeno(1,2,3-cd)pyrene	110000	~~U~~ R
53-70-3	Dibenzo(a,h)anthracene	110000	U J
191-24-2	Benzo(g,h,i)perylene	110000	U J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP5

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: O05

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082809.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 15 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	22000	~~U~~ J
111-44-4	bis(2-Chloroethyl)ether	120000	U
95-57-8	2-Chlorophenol	120000	U
95-50-1	1,2-Dichlorobenzene	120000	U
541-73-1	1,3-Dichlorobenzene	120000	U
106-46-7	1,4-Dichlorobenzene	120000	U
95-48-7	2-Methylphenol	120000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	120000	U
65794-96-9	3+4-Methylphenols	230000	U
621-64-7	n-Nitroso-di-n-propylamine	120000	U
67-72-1	Hexachloroethane	120000	U
98-95-3	Nitrobenzene	120000	U
78-59-1	Isophorone	120000	U
88-75-5	2-Nitrophenol	120000	U
105-67-9	2,4-Dimethylphenol	120000	U
111-91-1	bis(2-Chloroethoxy)methane	120000	U
120-83-2	2,4-Dichlorophenol	120000	U
120-82-1	1,2,4-Trichlorobenzene	120000	U
91-20-3	Naphthalene	120000	U
106-47-8	4-Chloroaniline	120000	U
87-68-3	Hexachlorobutadiene	120000	U
59-50-7	4-Chloro-3-methylphenol	120000	U
91-57-6	2-Methylnaphthalene	120000	U
77-47-4	Hexachlorocyclopentadiene	120000	U
88-06-2	2,4,6-Trichlorophenol	120000	U
95-95-4	2,4,5-Trichlorophenol	120000	U
91-58-7	2-Chloronaphthalene	120000	U
88-74-4	2-Nitroaniline	120000	U
131-11-3	Dimethylphthalate	120000	U
208-96-8	Acenaphthylene	120000	U
606-20-2	2,6-Dinitrotoluene	120000	U
99-09-2	3-Nitroaniline	120000	U
83-32-9	Acenaphthene	120000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP5

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: O05

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082809.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 15 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	120000	~~U~~ R
100-02-7	4-Nitrophenol	120000	U J
132-64-9	Dibenzofuran	120000	U
121-14-2	2,4-Dinitrotoluene	120000	U J
84-66-2	Diethylphthalate	120000	U
7005-72-3	4-Chlorophenyl-phenylether	120000	~~U~~ R
86-73-7	Fluorene	120000	U
100-01-6	4-Nitroaniline	120000	U
534-52-1	4,6-Dinitro-2-methylphenol	120000	~~U~~ R
86-30-6	n-Nitrosodiphenylamine	120000	U
101-55-3	4-Bromophenyl-phenylether	120000	U J
118-74-1	Hexachlorobenzene	120000	U
87-86-5	Pentachlorophenol	120000	U
85-01-8	Phenanthrene	120000	U
120-12-7	Anthracene	120000	U
86-74-8	Carbazole	120000	U
84-74-2	Di-n-butylphthalate	120000	U J
206-44-0	Fluoranthene	120000	U
129-00-0	Pyrene	120000	U
85-68-7	Butylbenzylphthalate	120000	U J
91-94-1	3,3'-Dichlorobenzidine	120000	U J
56-55-3	Benzo(a)anthracene	120000	U
218-01-9	Chrysene	120000	U
117-81-7	Bis(2-Ethylhexyl)phthalate	120000	U J
117-84-0	Di-n-octyl phthalate	120000	U
205-99-2	Benzo(b)fluoranthene	120000	U
207-08-9	Benzo(k)fluoranthene	120000	U
50-32-8	Benzo(a)pyrene	120000	U
193-39-5	Indeno(1,2,3-cd)pyrene	120000	~~U~~ R
53-70-3	Dibenzo(a,h)anthracene	120000	U J
191-24-2	Benzo(g,h,i)perylene	120000	U J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VP6

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: O08

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082810.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 12 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	28000	J
111-44-4	bis(2-Chloroethyl)ether	110000	U
95-57-8	2-Chlorophenol	110000	U
95-50-1	1,2-Dichlorobenzene	110000	U
541-73-1	1,3-Dichlorobenzene	110000	U
106-46-7	1,4-Dichlorobenzene	110000	U
95-48-7	2-Methylphenol	110000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	110000	U
65794-96-9	3+4-Methylphenols	220000	U
621-64-7	n-Nitroso-di-n-propylamine	110000	U
67-72-1	Hexachloroethane	110000	U
98-95-3	Nitrobenzene	110000	U
78-59-1	Isophorone	110000	U
88-75-5	2-Nitrophenol	110000	U
105-67-9	2,4-Dimethylphenol	110000	U
111-91-1	bis(2-Chloroethoxy)methane	110000	U
120-83-2	2,4-Dichlorophenol	110000	U
120-82-1	1,2,4-Trichlorobenzene	110000	U
91-20-3	Naphthalene	110000	U
106-47-8	4-Chloroaniline	110000	U
87-68-3	Hexachlorobutadiene	110000	U
59-50-7	4-Chloro-3-methylphenol	110000	U
91-57-6	2-Methylnaphthalene	110000	U
77-47-4	Hexachlorocyclopentadiene	110000	U
88-06-2	2,4,6-Trichlorophenol	110000	U
95-95-4	2,4,5-Trichlorophenol	110000	U
91-58-7	2-Chloronaphthalene	110000	U
88-74-4	2-Nitroaniline	110000	U
131-11-3	Dimethylphthalate	110000	U
208-96-8	Acenaphthylene	110000	U
606-20-2	2,6-Dinitrotoluene	110000	U
99-09-2	3-Nitroaniline	110000	U
83-32-9	Acenaphthene	110000	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. VP6

Lab Name: CHEMTECH Contract: ROY F.WESTON, INC.

Project No.: N5598 Site: RFP 2057 Location: LB15907 Group: VP1

Matrix: (soil/water) OTHER Lab Sample ID: O08

Sample wt/vol: 1.0 (g/mL) G Lab File ID: BC082810.D

Level: (low/med) Date Received: 8/16/01

% Moisture: 12 decanted: (Y/N): N Date Extracted: 8/21/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 8/28/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	110000	~~U~~ R
100-02-7	4-Nitrophenol	110000	U J
132-64-9	Dibenzofuran	110000	U
121-14-2	2,4-Dinitrotoluene	110000	U
84-66-2	Diethylphthalate	110000	U
7005-72-3	4-Chlorophenyl-phenylether	110000	~~U~~ R
86-73-7	Fluorene	110000	U
100-01-6	4-Nitroaniline	110000	U
534-52-1	4,6-Dinitro-2-methylphenol	110000	~~U~~ R
86-30-6	n-Nitrosodiphenylamine	110000	U
101-55-3	4-Bromophenyl-phenylether	110000	U J
118-74-1	Hexachlorobenzene	110000	U
87-86-5	Pentachlorophenol	110000	U
85-01-8	Phenanthrene	110000	U
120-12-7	Anthracene	110000	U
86-74-8	Carbazole	110000	U
84-74-2	Di-n-butylphthalate	110000	U J
206-44-0	Fluoranthene	110000	U
129-00-0	Pyrene	110000	U
85-68-7	Butylbenzylphthalate	110000	U J
91-94-1	3,3'-Dichlorobenzidine	110000	U J
56-55-3	Benzo(a)anthracene	110000	U
218-01-9	Chrysene	110000	U
117-81-7	Bis(2-Ethylhexyl)phthalate	110000	U J
117-84-0	Di-n-octyl phthalate	110000	U
205-99-2	Benzo(b)fluoranthene	110000	U
207-08-9	Benzo(k)fluoranthene	110000	U
50-32-8	Benzo(a)pyrene	110000	U
193-39-5	Indeno(1,2,3-cd)pyrene	110000	~~U~~ R
53-70-3	Dibenzo(a,h)anthracene	110000	U J
191-24-2	Benzo(g,h,i)perylene	110000	U J

CHEMTECH

CASE NARRATIVE

Roy F. Weston, INC
RFP NO: 2057
PO NO: 0027708
Chemtech Project # N5598LP

A. Number of Samples and Date of Receipt
6 Soils samples plus An MS/MSD were delivered to the laboratory intact on 08/16/01.

B. Parameters
Tests requested on the Chain of Custody were Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Metals & General Chemistry. This Case Narrative reviews results for Pesticides.

C. Analytical Techniques:
Samples were analyzed for Pesticides according Method 8081 on instrument ECD 3. The front column is RTX-5 which is 30 meters, DF= 0.5, ID= 0.53mm, Catalog # 10240. The rear column is RTX- 1701, 30 meters, DF= 0.5, ID= 0.53mm, Catalog # 12040.

D. QA/ QC Samples:
The Surrogate Recoveries for each sample are found in Form II-F. Method Blank Summaries are located on Form IV-C. The Matrix Spike and Matrix Spike Duplicate were analyzed and are reported on Form 3F.

Surrogate recoveries met requirements. MS/MSD recoveries and RPDs met requirements. Holding Times were met. Calibrations met requirements. Surrogate Retention Times were acceptable. Blank analyses did not indicate the presence of contamination.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature Mildred V Reyes Name: Mildred V. Reyes

Date: 9/12/01 Title: QA/QC

CHEMTECH

284, Sheffield Street Mountainside NJ 07092
Tel: 908-789-8900 Fax: 908-789-8922

COVER PAGE

ProjectID: RFP 2057

Order N5598 **CustomerName** Roy F. Weston, Inc.

LAB SAMPLE NO.	CLIENT SAMPLE NO
N5598-01	VP1
N5598-02	VP2
N5598-03	VP3
N5598-04	VP4
N5598-05	VP5
N5598-06	VP5MS
N5598-07	VP5MSD
N5598-08	VP6

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: Hildred V. Reyes Name: Hildred V. Reyes

Date: 9/12/01 Title: QA/QC

NYDOH CERTIFICATION NO.11376 NJDEP CERTIFICATION NO. 12013

CHEMTECH

284 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

Tabulated Analytical Report
PESTICIDES

Project Name: RFP 2057
Client: ROY F. WESTON, INC.
Client ID: VP1
Lab ID: N5598-01
Filename: 3PS0814.D
Lab Project No: N5598

MATRIX: SOLID
Date extracted: 8/21/2001
Ext. Batch: PB082101-06
Date Analyzed: 8/24/2001
Dilution: 1
QC Batch: LB15906
Analyst: CT

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		50
58-89-9	gamma-BHC (Lindane)	U	U		50
76-44-8	Heptachlor	U	U		50
309-00-2	Aldrin	U	U		50
319-85-7	beta-BHC	U	U		50
319-86-8	delta-BHC	U	U		50
1024-57-3	Heptachlor epoxide	U	U		50
959-98-8	Endosulfan I	U	U		50
5103-71-9	gamma-Chlordane	U	U		50
5103-74-2	alpha-Chlordane	U	U		50
72-55-9	4,4'-DDE	U	U		50
60-57-1	Dieldrin	U	U		50
72-20-8	Endrin	U	U		50
33213-65-9	Endosulfan II	U	U		50
72-54-8	4,4'-DDD	U	U		50
50-29-3	4,4'-DDT	U	U		50
7421-93-4	Endrin aldehyde	U	U		50
1031-07-8	Endosulfan Sulfate	U	U		50
72-43-5	Methoxychlor	U	U		50
53494-70-5	Endrin ketone	U	U		50
8001-35-2	Toxaphene	U	U		500

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 91%
Initial wt.: 1.01
Final vol.: 10

Tabulated Analytical Report
PESTICIDES

Project Name: RFP 2057
Client: ROY F. WESTON, INC.
Client ID: VP2
Lab ID: N5598-02
Filename: 3PS0815.D
Lab Project No: N5598

MATRIX: SOLID
Date extracted: 8/21/01
Ext. Batch: PB082101-06
Date Analyzed: 8/24/01
Dilution: 1
QC Batch: LB15906
Analyst: CT

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		50
58-89-9	gamma-BHC (Lindane)	U	U		50
76-44-8	Heptachlor	U	U		50
309-00-2	Aldrin	U	U		50
319-85-7	beta-BHC	U	U		50
319-86-8	delta-BHC	U	U		50
1024-57-3	Heptachlor epoxide	U	U		50
959-98-8	Endosulfan I	U	U		50
5103-71-9	gamma-Chlordane	U	U		50
5103-74-2	alpha-Chlordane	U	U		50
72-55-9	4,4'-DDE	U	U		50
60-57-1	Dieldrin	U	U		50
72-20-8	Endrin	U	U		50
33213-65-9	Endosulfan II	U	U		50
72-54-8	4,4'-DDD	U	U		50
50-29-3	4,4'-DDT	U	U		50
7421-93-4	Endrin aldehyde	U	U		50
1031-07-8	Endosulfan Sulfate	U	U		50
72-43-5	Methoxychlor	U	U		50
53494-70-5	Endrin ketone	U	U		50
8001-35-2	Toxaphene	U	U		500

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 91%
Initial wt.: 1.02
Final vol.: 10

Tabulated Analytical Report
PESTICIDES

Project Name: RFP 2057
Client: ROY F. WESTON, INC.
Client ID: VP3
Lab ID: N5598-03
Filename: 3PS0816.D
Lab Project No: N5598

MATRIX: SOLID
Date extracted: 8/21/01
Ext. Batch: PB082101-06
Date Analyzed: 8/24/01
Dilution: 1
QC Batch: LB15906
Analyst: CT

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		50
58-89-9	gamma-BHC (Lindane)	U	U		50
76-44-8	Heptachlor	U	U		50
309-00-2	Aldrin	U	U		50
319-85-7	beta-BHC	U	U		50
319-86-8	delta-BHC	U	U		50
1024-57-3	Heptachlor epoxide	U	U		50
959-98-8	Endosulfan I	U	U		50
5103-71-9	gamma-Chlordane	U	U		50
5103-74-2	alpha-Chlordane	U	U		50
72-55-9	4,4'-DDE	U	U		50
60-57-1	Dieldrin	U	U		50
72-20-8	Endrin	U	U		50
33213-65-9	Endosulfan II	U	U		50
72-54-8	4,4'-DDD	U	U		50
50-29-3	4,4'-DDT	U	U		50
7421-93-4	Endrin aldehyde	U	U		50
1031-07-8	Endosulfan Sulfate	U	U		50
72-43-5	Methoxychlor	U	U		50
53494-70-5	Endrin ketone	U	U		50
8001-35-2	Toxaphene	U	U		500

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 89%
Initial wt.: 1.01
Final vol.: 10

Tabulated Analytical Report
PESTICIDES

Project Name:	RFP 2057	**MATRIX:**	SOLID
Client:	ROY F. WESTON, INC.	**Date extracted:**	8/21/01
Client ID:	VP4	**Ext. Batch:**	PB082101-06
Lab ID:	N5598-04	**Date Analyzed:**	8/24/01
Filename:	3PS0817.D	**Dilution:**	1
Lab Project No:	N5598	**QC Batch:**	LB15906
		Analyst:	CT

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		50
58-89-9	gamma-BHC (Lindane)	U	U		50
76-44-8	Heptachlor	U	U		50
309-00-2	Aldrin	U	U		50
319-85-7	beta-BHC	U	U		50
319-86-8	delta-BHC	U	U		50
1024-57-3	Heptachlor epoxide	U	U		50
959-98-8	Endosulfan I	U	U		50
5103-71-9	gamma-Chlordane	U	U		50
5103-74-2	alpha-Chlordane	U	U		50
72-55-9	4,4'-DDE	U	U		50
60-57-1	Dieldrin	U	U		50
72-20-8	Endrin	U	U		50
33213-65-9	Endosulfan II	U	U		50
72-54-8	4,4'-DDD	U	U		50
50-29-3	4,4'-DDT	U	U		50
7421-93-4	Endrin aldehyde	U	U		50
1031-07-8	Endosulfan Sulfate	U	U		50
72-43-5	Methoxychlor	U	U		50
53494-70-5	Endrin ketone	U	U		50
8001-35-2	Toxaphene	U	U		500

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS	**87%**
Initial wt.:	**1.00**
Final vol.:	**10**

Tabulated Analytical Report
PESTICIDES

Project Name:	RFP 2057	**MATRIX:**	SOLID
Client:	ROY F. WESTON, INC.	**Date extracted:**	8/21/01
Client ID:	VP5	**Ext. Batch:**	PB082101-06
Lab ID:	N5598-05	**Date Analyzed:**	8/24/01
Filename:	3PS0824.D	**Dilution:**	1
Lab Project No:	N5598	**QC Batch:**	LB15906
		Analyst:	CT

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		50
58-89-9	gamma-BHC (Lindane)	U	U		50
76-44-8	Heptachlor	U	U		50
309-00-2	Aldrin	U	U		50
319-85-7	beta-BHC	U	U		50
319-86-8	delta-BHC	U	U		50
1024-57-3	Heptachlor epoxide	U	U		50
959-98-8	Endosulfan I	U	U		50
5103-71-9	gamma-Chlordane	U	U		50
5103-74-2	alpha-Chlordane	U	U		50
72-55-9	4,4'-DDE	U	U		50
60-57-1	Dieldrin	U	U		50
72-20-8	Endrin	U	U		50
33213-65-9	Endosulfan II	U	U		50
72-54-8	4,4'-DDD	U	U		50
50-29-3	4,4'-DDT	U	U		50
7421-93-4	Endrin aldehyde	U	U		50
1031-07-8	Endosulfan Sulfate	U	U		50
72-43-5	Methoxychlor	U	U		50
53494-70-5	Endrin ketone	U	U		50
8001-35-2	Toxaphene	U	U		500

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS	**86%**
Initial wt.:	**1.00**
Final vol.:	**10**

Tabulated Analytical Report
PESTICIDES

Project Name: RFP 2057
Client: ROY F. WESTON, INC.
Client ID: VP6
Lab ID: N5598-08
Filename: 3PS0818.D
Lab Project No: N5598

MATRIX: SOLID
Date extracted: 8/21/01
Ext. Batch: PB082101-06
Date Analyzed: 8/24/01
Dilution: 1
QC Batch: LB15906
Analyst: CT

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		50
58-89-9	gamma-BHC (Lindane)	U	U		50
76-44-8	Heptachlor	U	U		50
309-00-2	Aldrin	U	U		50
319-85-7	beta-BHC	U	U		50
319-86-8	delta-BHC	U	U		50
1024-57-3	Heptachlor epoxide	U	U		50
959-98-8	Endosulfan I	U	U		50
5103-71-9	gamma-Chlordane	U	U		50
5103-74-2	alpha-Chlordane	U	U		50
72-55-9	4,4'-DDE	U	U		50
60-57-1	Dieldrin	U	U		50
72-20-8	Endrin	U	U		50
33213-65-9	Endosulfan II	U	U		50
72-54-8	4,4'-DDD	U	U		50
50-29-3	4,4'-DDT	U	U		50
7421-93-4	Endrin aldehyde	U	U		50
1031-07-8	Endosulfan Sulfate	U	U		50
72-43-5	Methoxychlor	U	U		50
53494-70-5	Endrin ketone	U	U		50
8001-35-2	Toxaphene	U	U		500

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 88%
Initial wt.: 1.01
Final vol.: 10

CHEMTECH

CASE NARRATIVE

Roy F. Weston, INC
RFP NO: 2057
PO NO: 0027708
Chemtech Project # N5598LP

A. Number of Samples and Date of Receipt
6 Soils samples plus An MS/MSD were delivered to the laboratory intact on 08/16/01.

B. Parameters
Tests requested on the Chain of Custody were Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Metals & General Chemistry. This data package contains results for PCBs.

C. Analytical Techniques:
Samples were analyzed for PCBs according Method 8082 on instrument ECD 4. The front column is RTX-5 which is 30 meters, DF= 0.5, ID= 0.53mm, Catalog # 10240. The rear column is RTX- 1701, 30 meters, DF= 0.5, ID= 0.53mm, Catalog # 12040.

D. QA/ QC Samples:
The Surrogate Recoveries for each sample are found in Form II-F. Method Blank Summaries are located on Form IV-C. The Matrix Spike and Matrix Spike Duplicate were analyzed and are reported on Form 3F.

Surrogate recoveries met requirements except for N5598-05. MS/MSD recoveries and RPDs met requirements. Blank Spikes recoveries met requirements. Holding Times were met. Calibrations met requirements. Surrogate Retention Times were acceptable. Blank analyses did not indicate the presence of contamination.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature Mildred V. Reyes Name: Mildred V. Reyes

Date: 9/12/01 Title: QA/QC

CHEMTECH

284, Sheffield Street Mountainside NJ 07092
Tel: 908-789-8900 Fax: 908-789-8922

COVER PAGE

ProjectID: RFP 2057

Order N5598

CustomerName Roy F. Weston, Inc.

LAB SAMPLE NO.	CLIENT SAMPLE NO
N5598-01	VP1
N5598-02	VP2
N5598-03	VP3
N5598-04	VP4
N5598-05	VP5
N5598-06	VP5MS
N5598-07	VP5MSD
N5598-08	VP6

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: Hildred V. Reyes Name: Hildred V. Reyes

Date: 9/12/01 Title: DA/QC

NYDOH CERTIFICATION NO.11376

NJDEP CERTIFICATION NO. 12013

CHEMTECH

234 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

Tabulated Analytical Report
POLYCHLORINATED BIPHENYLS
EPA METHOD 8082

Project Name :	**RFP 2057**	**MATRIX:**	**SOLID**
Client:	**ROY F.WESTON. INC.**	**Date Extracted:**	**8/21/01**
Client ID:	**VP1**	**Ext. Batch:**	**PB-082101-05**
Lab ID:	**N5598-01**	**Date Analyzed:**	**8/28/01**
Filename:	**4PC9310.D**	**DILUTION:**	**1**
Lab Project No:	**N5598**		
		Analyst:	**M.T.**

CAS #	COMPOUNDS	RESULTS (ug/kg)	QUALIFIER	MDL (ug/kg)
12674-11-2	AROCLOR 1016	U		540
11104-28-2	AROCLOR 1221	U		540
11141-16-5	AROCLOR 1232	U		540
53469-21-9	AROCLOR 1242	U		540
12672-29-6	AROCLOR 1248	U		540
11097-69-1	AROCLOR 1254	U		540
11096-82-5	AROCLOR 1260	U		540

%SOLIDS **91%**
Initial wt: **1.01**
Final vol: **10**

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

Tabulated Analytical Report
POLYCHLORINATED BIPHENYLS
EPA METHOD 8082

Project Name :	**RFP 2057**	**MATRIX:**	**SOLID**
Client:	**ROY F.WESTON. INC.**	**Date Extracted:**	**8/21/01**
Client ID:	**VP2**	**Ext. Batch:**	**PB-082101-05**
Lab ID:	**N5598-02**	**Date Analyzed:**	**8/28/01**
Filename:	**4PC9311.D**	**DILUTION:**	**1**
Lab Project No:	**N5598**		
		Analyst:	**M.T.**

CAS #	COMPOUNDS	RESULTS (ug/kg)	QUALIFIER	MDL (ug/kg)
12674-11-2	AROCLOR 1016	U		540
11104-28-2	AROCLOR 1221	U		540
11141-16-5	AROCLOR 1232	U		540
53469-21-9	AROCLOR 1242	U		540
12672-29-6	AROCLOR 1248	U		540
11097-69-1	AROCLOR 1254	U		540
11096-82-5	AROCLOR 1260	U		540

%SOLIDS **91%**
Initial wt: **1.02**
Final vol: **10**

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

Tabulated Analytical Report
POLYCHLORINATED BIPHENYLS
EPA METHOD 8082

Project Name :	**RFP 2057**	**MATRIX:**	**SOLID**
Client:	**ROY F.WESTON. INC.**	**Date Extracted:**	**8/21/01**
Client ID:	**VP6**	**Ext. Batch:**	**PB-082101-05**
Lab ID:	**N5598-08**	**Date Analyzed:**	**8/29/01**
Filename:	**4PC9315.D**	**DILUTION:**	**1**
Lab Project No:	**N5598**		
		Analyst:	**M.T.**

CAS #	COMPOUNDS	RESULTS (ug/kg)	QUALIFIER	MDL (ug/kg)
12674-11-2	AROCLOR 1016	U		560
11104-28-2	AROCLOR 1221	U		560
11141-16-5	AROCLOR 1232	U		560
53469-21-9	AROCLOR 1242	U		560
12672-29-6	AROCLOR 1248	U		560
11097-69-1	AROCLOR 1254	U		560
11096-82-5	AROCLOR 1260	U		560

%SOLIDS	**88%**
Initial wt:	**1.01**
Final vol:	**10**

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

Title: Evaluation of Inorganic Data for the Contract laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

Case #: RFP # 2057 **Site: Veteran's Park Site**

SDG#: N5598 **Lab: Chemtech Consulting Group** **Matrix: Waste/Soil: 06 Water: NA**

Contractor: WESTON-RST **Reviewer: SMITA SUMBALY**

A.2.1 Validation Flags- The following flags have been applied in red by the data validator and must be considered by the data user.

J- This flag indicates the result qualified as estimated.

Red-Line- A red-line drawn through a sample result indicates an unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data- The results that do not carry "J" or "red-line" are fully usable.

Contractual Qualifiers- The legend of contractual qualifiers applied by the laboratory on Form I's is found on page B-20 of SOW ILM04.0.

A.2.2 The data assessment is given below and on the attached sheets.

On August 16, 2001, USEPA Region II RST sampling personnel collected six waste samples, including one field duplicate and a MS/MSD sample from the Veteran's Park Site, located at the South Plainfield, Middlesex County, New Jersey. Within 24 hours of collection, the samples were hand delivered to Chemtech Consulting Group, 282 Sheffield Street, Mountainside, New Jersey. The laboratory verified that the samples were received intact and properly custody sealed (sample cooler temperature recorded at $\pm$ 4.0°C).

Target Analyte List (TAL) inorganic analyses were performed following the Contract Laboratory Program (CLP) Statement of Work (SOW) number ILM04.0. Mercury by method 245.1. RCRA parameters were analyzed according to EPA SW-846 Method No. 1010 for ignitability; Method No. 9040 for corrosivity; Method No. 9010 for reactive cyanide, Method No. 9030 for reactive sulfide and Method 418.1 for Total Petroleum Hydrocarbons (TPH).

A.2.2 (continuation)

Client identification (ID) and laboratory ID numbers are as follows:

Client ID No.	Laboratory ID No.	Matrix	Analysis
VP1	N5598-01	Waste	Total Metals + CN & RCRA Parameters
VP2	N5598-02	Waste	Total Metals + CN & RCRA Parameters
VP3	N5598-03	Waste	Total Metals + CN & RCRA Parameters
VP4	N5598-04	Waste	Total Metals + CN & RCRA Parameters
VP5	N5598-05	Waste	Total Metals + CN & RCRA Parameters
VP6 [1]	N5598-08	Waste	Total Metals + CN & RCRA Parameters

[1]) Soil sample **VP6** is a field duplicate sample of **VP5**.

The results presented in the data package are acceptable with the exception noted in the following data assessment narrative.

CRDL STANDARD RECOVERY:-

The following analytes were qualified estimated "J" due to Contract Required Detection Limit (CRDL) Standard Percent recoveries (% R) outside quality control limits and because their concentration fell within "affected ranges":

ANALYTE	% RECOVERY	AFFECTED RANGE	QUALIFIER	ASSOCIATED SAMPLES
Selenium	77.5%	0.0 - 20.0 ug/l	"J"	VP1

A.2.2 (continuation)

MATRIX SPIKE RECOVERY:-

The following TAL inorganic analytes were either qualified as estimated "J" or rejected "red-lined"in the associated samples due to spike recoveries (% R) outside of specified QC limits in the associated spike samples and because
the sample result (SR) concentration < 4 X the spike added (SA) concentration:

ANALYTE	PERCENT RECOVERY	QC LIMIT	QUALIFIER	ASSOCIATED SAMPLES
Mercury	34.0%	75 - 125%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6

ICP SERIAL DILUTION:-

The following positive TAL inorganic data > 10 X IDL (or > MDL when the MDL is > 10 X IDL) were either qualified as estimated "J" or rejected "red-line" because the percent difference (% D) between the Initial Sample result (I) and the Serial Dilution Sample result (S) is either between 10-100% or > 100% when the concentration of I is > 10 X IDL:

ANALYTE	CONTROL LIMIT	PERCENT DIFFERENCE	QUALIFIER	ASSOCIATED SAMPLES
Sodium	>5000 ug/l	14.0%	"J"	VP1, VP2, VP3, VP4, VP5 & VP6
Potassium	>5000 ug/l	26.4%	"J"	VP4

Resource Conservation Recovery Act (RCRA) Characteristics, AND Total Petroleum Hydrocarbons:

The laboratory provided analysis of a method blank at the beginning of the run. All analytical blank results are within QC criteria. (< MDL). QC runs for the package consists of matrix spike duplicate. All RPD values for blank spike duplicate analysis fall within ± 20% and no qualifications are necessary.

Reactive Cyanide: All samples exhibit characteristics of reactive cyanide less than Instrument Detection Limit (IDL)
Reactive sulfide: All samples exhibit characteristics of reactive sulfide less than Instrument Detection Limit (IDL)
Corrosivity: The pH/Corrosivity values were reported between 5.27 - 7.06 pH unit.
Ignitability: All samples did not ignited.

A.2.2 (continuation)

FIELD DUPLICATE ANALYSIS:

The pH/corrosivity values of field duplicate sample pairs **VP5 / VP6** were qualified as estimated ("J") because the pH/corrosivity values of these sample pairs differ by > ± 0.1 pH unit.

ANALYTE	RPD/DIFFERENCE	QUALIFIER	ASSOCIATED SAMPLES
pH/corrosivity	± 0.1 PH unit	"J"	VP5 & VP6

TPH Analysis:

The laboratory provided analysis of a method blank at the beginning of the run. The analytical blank result is within
QC criteria. (< MDL). QC runs for the package consists of a Laboratory Control Spike/Spike Duplicate Recovery. All RPD values for spike duplicate analysis fall within ± 20% and spike recovery analysis fall within 75 -125%. No qualifications are necessary.

A.2.3 Contract Problem/Non-Compliance:

None

MMB/ESAT Reviewer: _____ Signature _____ Date:

Contractor Reviewer: Angela Simpson Signature 11/07/01 Date:

Verified by: _____ Signature _____ Date:

OTHER ANALYTES WORK TABLE

PROJECT: Veteran's Park Site

SAMPLING DATE: August 16, 2001

SAMPLE #/CONCENTRATION (mg/kg)

Total Metals	Matrix: / Client ID: / Lab ID:	SOIL VP1 N5598-01 S	SOIL VP2 N5598-02 S	SOIL VP3 N5598-03 S	SOIL VP4 N5598-04 S	SOIL VP5 N5598-05 S	SOIL VP6 N5598-08 S
Percent Solids		90.8	91.0	89.3	87.2	85.5	87.9
Dilution Factor	IDL	1.0	1.0	1.0	1.0	1.0	1.0
Aluminum	9.14	3630	21.1 B	194	6250	3030	4750
Antimony	0.74	105	U	U	U	U	U
Arsenic	1.00	10.7	U	1.2 B	3.7	2.2 B	2.3
Barium	0.40	527	54.5	41.9 B	89.5	67.3	52.6
Beryllium	0.02	11.3	U	0.02 B	0.59 B	0.18 B	0.26 B
Cadmium	0.60	12.1	U	U	1.5	U	U
Calcium	2.14	972 B	75.9 B	413 B	11600	1390	1750
Chromium	1.00	55.9	15.8	8.0	11.0	13.1	11.6
Cobalt	0.36	116	U	0.69 B	4.1 B	3.1 B	4.9 B
Copper	0.44	106	85.1	89.6	72.5	60.0	38.4
Iron	1.40	7890	1690	5330	8140	10800	9650
Lead	0.60	28.7	13.4	14.5	222	24.0	21.8
Magnesium	15.18	1250	18.2 B	91.4 B	3730	1130 B	2490
Manganese	0.24	260	5.9	26.1	321	152	205
Mercury	0.10	U J	U J	U J	U J	U J	U J
Nickel	0.80	127	2.9 B	9.1	11.9	12.6	14.5
Potassium	4.38	575 B	30.9 B	80.3 B	1230 J	660 B	659 B
Selenium	1.00	2.5 J	0.70 B	0.87 B	1.2	0.98 B	U
Silver	1.00	9.6	U	U	6.9	U	U
Sodium	98.04	15300 J	2550 J	31600 J	10200 J	22700 J	8720 J
Thallium	1.14	10.0	U	U	U	U	U
Vanadium	0.64	121	U	U	12.5	7.3 B	12.5
Zinc	1.70	155	18.3	21.0	70.2	43.6	43.4
Cyanide	0.5	U	U	U	U	U	U

Inorganic Qualifiers

IDL - Instrument Detection Limit
U - non-detected compound
J - estimated value
B - between the instrument detection limit (IDL) and the contract required detection limit (CRDL)
R - rejected compound

OTHER ANALYTES WORK TABLE

Project: Veteran's Park Site

Sampling Date: August 16, 2001 **(Unless otherwise indicated)**

SAMPLE #/CONCENTRATION (mg/Kg)

RCRA Characteristics	Method Limit	Soil N5598-01 VP1	Soil N5598-02 VP2	Soil N5598-03 VP3	Soil N5598-04 VP4
Percent Solids	mg/Kg	90.8	91.0	89.3	87.2
Dilution Factor		--	--	--	--
Reactive Sulfide	40 mg/kg	< 40	< 40	< 40	< 40
Reactive Cyanide	10 mg/kg	< 10	< 10	< 10	< 10
pH Determination	1-14 pH units	7.06	6.51	5.43	5.45
Ignitability	-	unignit	unignit	unignit	unignit
Total Petroleum Hydrocarbon	40 mg/kg	2400	3700	67000	160000

RCRA Characteristics	Method Limit	Soil N5598-05 VP5	Soil N5598-08 VP6		
Percent Solids	mg/Kg	85.5	87.9		
Dilution Factor		--	--		
Reactive Sulfide	200 mg/kg	< 40	< 40		
Reactive Cyanide	200 mg/kg	< 10	< 10		
pH Determination	1-14 pH units	5.27 J	5.11 J		
Ignitability	-	unignit	unignit		
Total Petroleum Hydrocarbon	40 mg/kg	370000	210000		

ND - not detected
- not applicable
J - estimated value
R - rejected compound

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

VP5 & VP6

Lab Name: CHEMTECH Contract: WESTON-RST

Lab Code: CHEMED Case No.: 2057 SAS No.: NA SDG No.: M5598

Matrix (soil/water): Soil Level (low/med): Low

Solids for Sample: 85.5 % Solids for Duplicate: 87.9

Concentration Units (ug/L or mg/kg dry weight): ug/g

Analyte	Control Limit	VP5 Sample (S)	C	VP6 Duplicate (D)	C	RPD	Q	M
Aluminum	100%	13062		21304		48%		
Antimony			U		U	NC		
Arsenic	±20	9.34	B	10.3		<2xCRDL		
Barium	±400	290.5		235.9		<2xCRDL		
Beryllium	±10	0.8	B	1.2	B	<2xCRDL		
Cadmium			U		U	NC		
Calcium	±10000	6001.5		7831.7		<2xCRDL		
Chromium	±50	56.7		57.9		<2xCRDL		
Cobalt	±100	13.2	B	22.0	B	<2xCRDL		
Copper	100%	259.1		172.1		40.4%		
Iron	100%	46501		43244		7.2%		
Lead	100%	103.8		97.7		6.1%		
Magnesium	±10,000	4896	B	11154		<2xCRDL		
Manganese	100%	656.5		917.0		33.1%		
Mercury			U		U	NC		
Nickel	±80	54.6		65.2		<2xCRDL		
Potassium	±10,000	2849.2	B	2954	B	<2xCRDL		
Selenium	±10	4.24	B	8	U	<2xCRDL		
Silver			U		U	NC		
Sodium	100%	97876		39106		85.8%		
Thallium			U		U	NC		
Vanadium	±100	31.7	B	55.9		<2xCRDL		
Zinc	100%	188.4		194.5		3.2%		
Cyanide	—	NA		NA		—		

CHEMTECH

CASE NARRATIVE

Roy F. Weston, INC
RFP NO: 2057
PO NO: 0027708
Chemtech Project # N5598LP

A. Number of Samples and Date of Receipt
6 Soils samples plus An MS/MSD were delivered to the laboratory intact on 08/16/01.

B. Parameters
Tests requested on the Chain of Custody were Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Metals & General Chemistry. This data package contains results for Metals.

C. Analytical Techniques:
The analysis of Metals is based on CLP Methodology and Mercury by Method 245.1.

D. QA/ QC
A Method Blank, Laboratory Control Sample, Spike, Duplicate and Serial Dilution sample were digested and analyzed along with the samples.

Calibrations met requirements. Blank analyses did not indicate the presence of contamination. Interference Check Sample, Laboratory Control Sample were within Control Limits. Spike Samples recovery met requirement except for Mercury. Serial Dilution met requirements except for Potassium and Sodium. Duplicate analyses met requirement except for Zinc. RPDs met requirements.

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature Mildred V. Reyes Name: Mildred V. Reyes

Date 9/12/01 Title: QA/QC

CHEMTECH

284, Sheffield Street Mountainside NJ 07092
Tel: 908-789-8900 Fax: 908-789-8922

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ProjectID: RFP 2057

Order N5598

CustomerName Roy F. Weston, Inc.

LAB SAMPLE NO.	CLIENT SAMPLE NO
N5598-01	VP1
N5598-02	VP2
N5598-03	VP3
N5598-04	VP4
N5598-05	VP5
N5598-06	VP5MS
N5598-07	VP5MSD
N5598-08	VP6

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: Mildred V. Reyes Name: Mildred V. Reyes

Date: 9/12/01 Title: QA/QC

NYDOH CERTIFICATION NO.11376

NJDEP CERTIFICATION NO. 12013

CHEMTECH

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DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

B	If the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	If the analyte was analyzed for, but not detected.
E	The reported value is estimated because of the presence of interference
M	Duplicate injection precision not met.
N	Spiked sample recovery not within control limits.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while absorbance is less that 50% of spike absorbance.
*	Duplicate analysis not within control limits.
+	Correlation coefficient for the MSA is less than 0.995.
***	Entering "S", "W " or " +" is mutually exclusive. NO combination of these qualifiers can appear in the same field for an analyte.

M Method qualifiers

"P" for ICP instrument
"A" for Flame AA
"PM" for ICP when Microwave Digestion is used
"AM" for flame AA when Microwave Digestion is used
"FM" for furnace AA when Microwave Digestion is used
"CV" for Manual Cold Vapor AA
"AV" for automated Cold Vapor AA
"CA" for MIDI-Distillation Spectrophotometric
"AS" for Semi -Automated Spectrophotometric
"C" for Manual Spectrophotometric
"T" for Titrimetric
"NR" for analyte not required to be analyzed

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

VP1

ab Name: CHEMTECH EDISON Contract: 68-W00-088

ab Code: CHEMED Case No.: SAS No.: SDG No.: N5598

atrix (soil/water): SOIL Lab Sample ID: N5598-01 S

evel (low/med): LOW Date Received: 08/16/01

Solids: 90.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3630			P
7440-36-0	Antimony	105			P
7440-38-2	Arsenic	10.7			P
7440-39-3	Barium	527			P
7440-41-7	Beryllium	11.3			P
7440-43-9	Cadmium	12.1			P
7440-70-2	Calcium	972	B		P
7440-47-3	Chromium	55.9			P
7440-48-4	Cobalt	116			P
7440-50-8	Copper	106			P
7439-89-6	Iron	7890			P
7439-92-1	Lead	28.7			P
7439-95-4	Magnesium	1250			P
7439-96-5	Manganese	260			P
7439-97-6	Mercury	0.10	U	NJ	CV
7440-02-0	Nickel	127			P
7440-09-7	Potassium	575	B	E	P
7782-49-2	Selenium	2.5		J	P
7440-22-4	Silver	9.6			P
7440-23-5	Sodium	15300		EJ	P
7440-28-0	Thallium	10.0			P
7440-62-2	Vanadium	121			P
7440-66-6	Zinc	155		*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

VP2

Lab Name: CHEMTECH EDISON Contract: 68-W00-088

Lab Code: CHEMED Case No.: SAS No.: SDG No.: N5598

Matrix (soil/water): SOIL Lab Sample ID: N5598-02 S

Level (low/med): LOW Date Received: 08/16/01

% Solids: 91.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.1	B		P
7440-36-0	Antimony	0.80	U		P
7440-38-2	Arsenic	1.1	U		P
7440-39-3	Barium	54.5			P
7440-41-7	Beryllium	0.02	U		P
7440-43-9	Cadmium	0.65	U		P
7440-70-2	Calcium	75.9	B		P
7440-47-3	Chromium	15.8			P
7440-48-4	Cobalt	0.39	U		P
7440-50-8	Copper	85.1			P
7439-89-6	Iron	1690			P
7439-92-1	Lead	13.4			P
7439-95-4	Magnesium	18.2	B		P
7439-96-5	Manganese	5.9			P
7439-97-6	Mercury	0.10	U	N J	CV
7440-02-0	Nickel	2.9	B		P
7440-09-7	Potassium	30.9	B	E	P
7782-49-2	Selenium	0.70	B		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	2550		E J	P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	0.69	U		P
7440-66-6	Zinc	18.3		*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

VP3

Lab Name: CHEMTECH EDISON Contract: 68-W00-088

Lab Code: CHEMED Case No.: SAS No.: SDG No.: N5598

Matrix (soil/water): SOIL Lab Sample ID: N5598-03 S

Level (low/med): LOW Date Received: 08/16/01

% Solids: 89.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	194			P
7440-36-0	Antimony	0.81	U		P
7440-38-2	Arsenic	1.2	B		P
7440-39-3	Barium	41.9	B		P
7440-41-7	Beryllium	0.02	B		P
7440-43-9	Cadmium	0.66	U		P
7440-70-2	Calcium	413	B		P
7440-47-3	Chromium	8.0			P
7440-48-4	Cobalt	0.69	B		P
7440-50-8	Copper	89.6			P
7439-89-6	Iron	5330			P
7439-92-1	Lead	14.5			P
7439-95-4	Magnesium	91.4	B		P
7439-96-5	Manganese	26.1			P
7439-97-6	Mercury	0.10	U	N J	CV
7440-02-0	Nickel	9.1			P
7440-09-7	Potassium	80.3	B	E	P
7782-49-2	Selenium	0.87	B		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	31600		E J	P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	0.70	U		P
7440-66-6	Zinc	21.0		*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

VP4

Lab Name: CHEMTECH EDISON Contract: 68-W00-088

Lab Code: CHEMED Case No.: SAS No.: SDG No.: N5598

Matrix (soil/water): SOIL Lab Sample ID: N5598-04 S

Level (low/med): LOW Date Received: 08/16/01

% Solids: 87.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6250			P
7440-36-0	Antimony	0.82	U		P
7440-38-2	Arsenic	3.7			P
7440-39-3	Barium	89.5			P
7440-41-7	Beryllium	0.59	B		P
7440-43-9	Cadmium	1.5			P
7440-70-2	Calcium	11600			P
7440-47-3	Chromium	11.0			P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	72.5			P
7439-89-6	Iron	8140			P
7439-92-1	Lead	222			P
7439-95-4	Magnesium	3730			P
7439-96-5	Manganese	321			P
7439-97-6	Mercury	0.11	U	NJ	CV
7440-02-0	Nickel	11.9			P
7440-09-7	Potassium	1230		EJ	P
7782-49-2	Selenium	1.2			P
7440-22-4	Silver	6.9			P
7440-23-5	Sodium	10200		EJ	P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	12.5			P
7440-66-6	Zinc	70.2		*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

VP5

Lab Name: CHEMTECH EDISON Contract: 68-W00-088

Lab Code: CHEMED Case No.: SAS No.: SDG No.: N5598

Matrix (soil/water): SOIL Lab Sample ID: N5598-05 S

Level (low/med): LOW Date Received: 08/16/01

% Solids: 85.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3030			P
7440-36-0	Antimony	0.86	U		P
7440-38-2	Arsenic	2.2	B		P
7440-39-3	Barium	67.3			P
7440-41-7	Beryllium	0.18	B		P
7440-43-9	Cadmium	0.69	U		P
7440-70-2	Calcium	1390			P
7440-47-3	Chromium	13.1			P
7440-48-4	Cobalt	3.1	B		P
7440-50-8	Copper	60.0			P
7439-89-6	Iron	10800			P
7439-92-1	Lead	24.0			P
7439-95-4	Magnesium	1130	B		P
7439-96-5	Manganese	152			P
7439-97-6	Mercury	0.12	U	N	CV
7440-02-0	Nickel	12.6			P
7440-09-7	Potassium	660	B	E	P
7782-49-2	Selenium	0.98	B		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	22700		E	P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	7.3	B		P
7440-66-6	Zinc	43.6		*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

VP6

Lab Name: CHEMTECH EDISON Contract: 68-W00-088

Lab Code: CHEMED Case No.: SAS No.: SDG No.: N5598

Matrix (soil/water): SOIL Lab Sample ID: N5598-08 S

Level (low/med): LOW Date Received: 08/16/01

% Solids: 87.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4750			P
7440-36-0	Antimony	0.83	U		P
7440-38-2	Arsenic	2.3			P
7440-39-3	Barium	52.6			P
7440-41-7	Beryllium	0.26	B		P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	1750			P
7440-47-3	Chromium	11.6			P
7440-48-4	Cobalt	4.9	B		P
7440-50-8	Copper	38.4			P
7439-89-6	Iron	9650			P
7439-92-1	Lead	21.8			P
7439-95-4	Magnesium	2490			P
7439-96-5	Manganese	205			P
7439-97-6	Mercury	0.10	U	N J	CV
7440-02-0	Nickel	14.5			P
7440-09-7	Potassium	659	B	E	P
7782-49-2	Selenium	0.49	U		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	8720		E J	P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	12.5			P
7440-66-6	Zinc	43.4		*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

CHEMTECH

CASE NARRATIVE

Roy F. Weston, INC
RFP NO: 2057
PO NO: 0027708
Chemtech Project # N5598LP

A. Number of Samples and Date of Receipt
6 Soils samples plus An MS/MSD were delivered to the laboratory intact on 08/16/01.

B. Parameters
Tests requested on the Chain of Custody were Volatile Organics, Semivolatile Organics, Pesticides, PCBs, Metals & General Chemistry. This Case Narrative reviews results for General Chemistry.

C. Analytical Techniques
The analysis of Total Petroleum Hydrocarbon is based on Method 418.1, Cyanide by Method 335.2, Ignitability by Method 1010, Percent Solids by Method 160.3, Reactive Cyanide by Method 9010, Reactive Sulfide by Method 9030, Total Petroleum Hydrocarbons by Method 418.1 and Corrosivity by Method 9040.

D. QA/ QC Samples
A Method Blank, Spike and Duplicate sample were analyzed along with the samples.

Blank analysis did not indicate the presence of contamination. Calibrations met requirements. Holding Times were met.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature Mildred V. Reyes Name: Mildred V. Reyes

Date: 9/12/01 Title: QA/QC

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ProjectID: RFP 2057

Order N5598

CustomerName Roy F. Weston, Inc.

LAB SAMPLE NO.	CLIENT SAMPLE NO
N5598-01	VP1
N5598-02	VP2
N5598-03	VP3
N5598-04	VP4
N5598-05	VP5
N5598-06	VP5MS
N5598-07	VP5MSD
N5598-08	VP6

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Signature: Mildred V. Reyes Name: Mildred V. Reyes

Date: 9/12/01 Title: QA/QC

NYDOH CERTIFICATION NO.11376

NJDEP CERTIFICATION NO. 12013

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LABORATORY REPORT

CLIENT: Roy F. Weston, Inc.

ATTN.: Smita Sumbaly

RFP 2057

LAB RECEIVING #: N5598

Analysis Meth.: ILM04.1 **Matrix:** Solid **Unit:** mg/Kg **Analyzed:** 8/30/01 **Analyst:** sejal

	Lab Sample ID:		N5598-01	N5598-02	N5598-03	N5598-04	
	Client Sample ID:	Method Blank	VP1	VP2	VP3	VP4	Detection Limit
OMPOUNDS:	D.F.:		1	1	1	1	
anide		<0.5	<0.6	<0.6	<0.6	<0.6	0.5

	Lab Sample ID:		N5598-05	N5598-06	N5598-07	N5598-08	
	Client Sample ID:	Method Blank	VP5	VP5MS	VP5MSD	VP6	Detection Limit
OMPOUNDS:	D.F.:		1	1	1	1	
anide		<0.5	<0.6	5.6	5.9	<0.6	0.5

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NYSDOH Certification No. 10624

NYSDOH Certification No. 11376
NJDEP Certification No. 12013

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LABORATORY REPORT

CLIENT: Roy F. Weston, Inc.

ATTN.: Smita Sumbaly

RFP 2057

LAB RECEIVING #: N5598

Analysis Meth.: 9040 **Matrix:** Solid **Analyzed:** 8/16/01

Unit: ph Units **Analyst:** heena

	Lab Sample ID:		N5598-01	N5598-02	N5598-03	N5598-04	Detection Limit
	Client Sample ID:	Method Blank	VP1	VP2	VP3	VP4	
COMPOUNDS:	D.F.:		1	1	1	1	
Corrosivity			7.06	6.51	5.43	5.45	

	Lab Sample ID:		N5598-05	N5598-06	N5598-07	N5598-08	Detection Limit
	Client Sample ID:	Method Blank	VP5	VP5MS	VP5MSD	VP6	
COMPOUNDS:	D.F.:		1	1	1	1	
Corrosivity			5.27 J	5.3	5.31	5.11 J	

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LABORATORY REPORT

CLIENT: Roy F. Weston, Inc.

ATTN.: Smita Sumbaly

RFP 2057

LAB RECEIVING #: N5598

Analysis Meth.: 1010 **Matrix:** Solid **Unit:** **Analyzed:** 8/22/01 **Analyst:** jayshree

	Lab Sample ID:		N5598-01	N5598-02	N5598-03	N5598-04	**Detection Limit**
	Client Sample ID:	Method Blank	VP1	VP2	VP3	VP4	
COMPOUNDS:	**D.F.:**		1	1	1	1	
Ignitability			UNIGNIT	UNIGNIT	UNIGNIT	UNIGNIT	

	Lab Sample ID:		N5598-05	N5598-06	N5598-07	N5598-08	**Detection Limit**
	Client Sample ID:	Method Blank	VP5	VP5MS	VP5MSD	VP6	
COMPOUNDS:	**D.F.:**		1	1	1	1	
Ignitability			UNIGNIT	UNIGNIT	UNIGNIT	UNIGNIT	

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LABORATORY REPORT

CLIENT: Roy F. Weston, Inc.

ATTN.: Smita Sumbaly

RFP 2057

LAB RECEIVING #: N5598

Analysis Meth.: 160.3 **Matrix:** Solid **Analyzed:** 8/21/01 **Unit:** % **Analyst:** pramit

	Lab Sample ID:		N5598-01	N5598-02	N5598-03	N5598-04	Detection Limit
	Client Sample ID:	Method Blank	VP1	VP2	VP3	VP4	
COMPOUNDS:	D.F.:		1	1	1	1	
Percent Solids			90.8	91.0	89.3	87.2	

	Lab Sample ID:		N5598-05	N5598-06	N5598-07	N5598-08	Detection Limit
	Client Sample ID:	Method Blank	VP5	VP5MS	VP5MSD	VP6	
COMPOUNDS:	D.F.:		1	1	1	1	
Percent Solids			85.5	86.7	NR	87.9	

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LABORATORY REPORT

CLIENT: Roy F. Weston, Inc.

ATTN.: Smita Sumbaly

RFP 2057

LAB RECEIVING #: N5598

Analysis Meth.: 7.3.3.2.REV 3

Matrix: Solid **Unit:** mg/Kg

Analyzed: 8/29/01 **Analyst:** anil

	Lab Sample ID:		N5598-01	N5598-02	N5598-03	N5598-04	
	Client Sample ID:	Method Blank	VP1	VP2	VP3	VP4	Detection Limit
COMPOUNDS:	D.F.:		1	1	1	1	
Reactive Cyanide		<10	<10	<10	<10	<10	10

	Lab Sample ID:		N5598-05	N5598-06	N5598-07	N5598-08	
	Client Sample ID:	Method Blank	VP5	VP5MS	VP5MSD	VP6	Detection Limit
COMPOUNDS:	D.F.:		1	1	1	1	
Reactive Cyanide		<10	<10	<10	<10	<10	10

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LABORATORY REPORT

CLIENT: Roy F. Weston, Inc.

ATTN.: Smita Sumbaly

RFP 2057

LAB RECEIVING #: N5598

Analysis Meth.: 7.3.3.2.REV 3

Matrix: Solid
Unit: mg/Kg

Analyzed: 8/29/01
Analyst: anil

	Lab Sample ID:		N5598-01	N5598-02	N5598-03	N5598-04	
	Client Sample ID:	Method Blank	VP1	VP2	VP3	VP4	Detection Limit
COMPOUNDS:	D.F.:		1	1	1	1	
Reactive Sulfide		<40	<40	<40	<40	<40	40

	Lab Sample ID:		N5598-05	N5598-06	N5598-07	N5598-08	
	Client Sample ID:	Method Blank	VP5	VP5MS	VP5MSD	VP6	Detection Limit
COMPOUNDS:	D.F.:		1	1	1	1	
Reactive Sulfide		<40	<40	<40	<40	<40	40

☐ 110 Route 4
Englewood, New Jersey 07631
Phone: 201.568.7400 Fax: 201.567.3231

NYSDOH Certification No. 10624

☑ 284 Sheffield Street
Mountainside, NJ 07092
Tel 908.789.8900 Fax: 908.789.8922

NYSDOH Certification No. 11376
NJDEP Certification No. 12013

CHEMTECH

LABORATORY REPORT

CLIENT: Roy F. Weston, Inc.

ATTN.: Smita Sumbaly

RFP 2057

LAB RECEIVING #: N5598

Analysis Meth.: 418.1

Matrix: Solid
Unit: mg/Kg

Analyzed: 8/23/01
Analyst: heena

	Lab Sample ID:		N5598-01	N5598-02	N5598-03	N5598-04	
	Client Sample ID:	Method Blank	VP1	VP2	VP3	VP4	Detection Limit
COMPOUNDS:	D.F.:		1	1	1	1	
Total Petroleum Hydrocarbon		<40	2400	3700	67000	160000	40

	Lab Sample ID:		N5598-05	N5598-06	N5598-07	N5598-08	
	Client Sample ID:	Method Blank	VP5	VP5MS	VP5MSD	VP6	Detection Limit
COMPOUNDS:	D.F.:		1	1	1	1	
Total Petroleum Hydrocarbon		<40	370000	370000	410000	210000	40

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FAX# 908-789-8972
Attn: Olmara

CHAIN OF CUSTODY RECORD

REP No. 3057
PO No. 0027708

WESTON MANAGERS DESIGNERS/CONSULTANTS

Removal Support Team
EPA CONTRACT 68-W-00-113
Phone (732)225-6116 Fax: 732-225-7037

Matrix Box No.	Preservative Box No.
1. Surface 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	1. HCl 2. HN03 3. Na2SO4 4. H2SO4 5. Other (Specify) 6. Ice Only N. Not Preserved * See Comments

Send verbal and written results to: Roy F. Weston, Inc.
Suite 201, 1090 King Georges Post Road, Edison, New Jersey 08837-3703
Attention: Smita Sumbaly, RST Analytical Coordinator

Sample Number	Sample Collection MM/DD/YY Time	Sample Matrix (Enter box 1)	Conc. Low-L Med-M High-H	Sample Type Comp-C Grab-G	Sample Preserv. (Enter box #)	RAS ANALYSIS VOA	BNA	PEST	PCBs	TAL	CN	RCRA ANALYSIS IGN	COR	REAC	OTHER
VP1	8/16/01 1429	7	H	G	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	TPH (P2)
VP2	1428	7	H	G	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
VP3	1441	7	H	G	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
VP4	1446	7	H	G	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
VP5	1459 1451	7	H	G	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	MS/MSD
VP6	1500	7	H	G	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Comments: 150

Person Assuming Responsibility for Samples: [signature] Time/Date 16:02 8/16/01

Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody
All	[signature]	1600	8/16/01	V Sunny. Retal.	Analysis
Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody
Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody

oy F. Weston, Inc.
EDERAL PROGRAMS DIVISION
Association with Inland Pollution Services P.R., Inc., Resource Applications, Inc., and GRB Environmental Services, Inc.